OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

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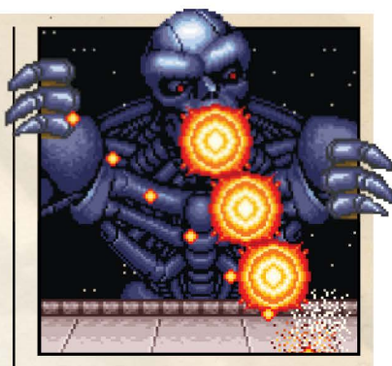

20 CLASSIC BOSSES

THE BEST VIDEOGAME VILLAINS AND WHY THEY ARE SO MEMORABLE

PLUS: THE RISE AND CRASH OF PORTABLE GAMES

AMIGA 500

270 GAMES, THE KEY PERIPHERALS: THE ULTIMATE COLLECTORS GUIDE

SCOTT ADAMS
THE QUESTPROBE CREATOR ON HIS LATEST GAME

ALSO INSIDE

- PAC-MANIA
- STEVEN KELLY
- COMMODORE 16
- ROGUE GALAXY
- THEME HOSPITAL
- CONVERSION KINGS
- LEISURE SUIT LARRY
- PLANESCAPE: TORMENT

ip IMAGINE PUBLISHING | DigitalEdition GreatDigitalMags.com | ISSUE 113

FEATURED INSIDE THIS ISSUE:

SHADOWFIRE
WE REVEAL KEY FACTS ABOUT THE UNFINISHED SCI-FI TRILOGY

MICRO MACHINES
DAVID DARLING REVISITS THE CLASSIC TOP DOWN RACING SERIES

KOKOTONI WILF
WAS ELITE'S FIRST EVER RELEASE A GENUINE JET SET WILLY BEATER?

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WORLD OF TANKS

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LET'S BATTLE

THE RETROBATES

FAVOURITE AMIGA GAME

DARRAN JONES

The first Amiga game I ever bought was *Eye Of The Beholder 2: The Legend Of Darkmoon*. I loved *D&D*; this was the perfect alternative.

Expertise:
Juggling a beautiful wife, two gorgeous girls and an award-winning magazine

Currently playing:
Euro Truck Simulator 2 (it's really good)

Favourite game of all time:
Strider

STUART HUNT

It has to be *Sensi*, best footy game ever. You can't beat playing it on the Amiga with a joystick either.

Expertise:
Games with flying bits in them

Currently Playing:
XCOM: Enemy Unknown

Favourite game of all time:
XCOM: Enemy Unknown

PAUL DRURY

I was very taken with *Super Stardust*, a superlative *Asteroids* clone with a bit of *Buck Rogers* thrown in. It's still a fine example of how to tastefully update a classic.

Expertise:
Typing 'help'

Currently playing:
Inheritance

Favourite game of all time:
Sheep In Space

JASON KELK

I'm tempted to say *Battle Squadron*, but the game that hooked me for the longest was the excellent *Turrican 2*.

Expertise:
Being a homebrew hero

Currently playing:
Geometry Wars: Galaxies (Wii)

Favourite game of all time:
Io

MARTYN CARROLL

The Secret Of Monkey Island. It's a conversion? So what! I once owned a dog that was smarter than you, etc.

Expertise:
Spectrum stuff

Currently playing:
Alien Breed on PSN

Favourite game of all time:
Jet Set Willy

RICHARD BURTON

Sensible World Of Soccer is not just the best Amiga football game ever, but arguably the greatest football videogame ever released on any system. A masterpiece of gaming.

Expertise:
Stuff and nonsense

Currently playing:
In The Hunt

Favourite game of all time:
Manic Miner

DAVID CROOKES

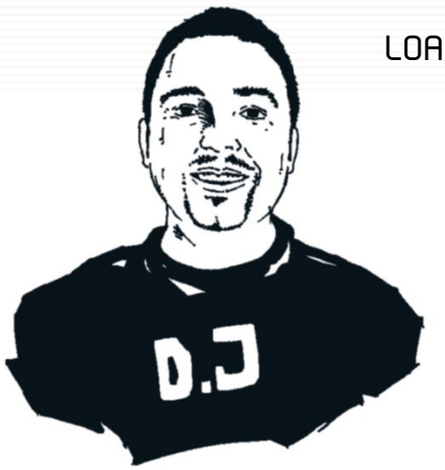
Alien Breed. Powering through those corridors, blasting evil enemies with powerful weapons fostered the sanity that pervades me today.

Expertise:
All things Amstrad CPC, *Dizzy*, Atari Lynx and PlayStation

Currently playing:
Journey

Favourite game of all time:
Broken Sword

LOADING...



If you've ever visited the Retro Gamer forum, you'll know that I like to collect things. Even now though, I still don't know why I really do this is. Is it a sickness? Am I a chronic hoarder, finding it impossible to let go of even the most worthless game cartridge? Or am I just trying to desperately cling to the last fragments of my youth, buying the games and systems I was always envious of growing up, but could never really afford. I really don't know, and as I approach my fortieth year I still have no idea what makes me crave collecting Saturn shoot-'em-ups, while avoiding collecting anything for the SNES that has sat unloved under my bed for the past seven months.

What I do know is that I often love the thrill of the hunt more than the playing of the actual game itself. I love discovering a bargain at my local car boot, or snatching a great find on eBay — the story of getting a boxed *Teenage Mutant Ninja Turtles: Turtles In Time* for £2.50 has been told in the office many times — almost as much as I love playing my eventual spoils. Hopefully this month's Collector's Guide will set off a similar spark in yourself. If you see a pristine copy of *Great Giana Sisters* on sale, stay away from it, though. That's mine.

Enjoy the magazine

CONTENTS

>> Load 113 Breathing new life into classic games

FEATURED

32 Cheap As Chips Kokotoni Wilf
Elite's Steve Wilcox tells us a little about the origins of the company's first game, a cool *Jet Set Willy* variant

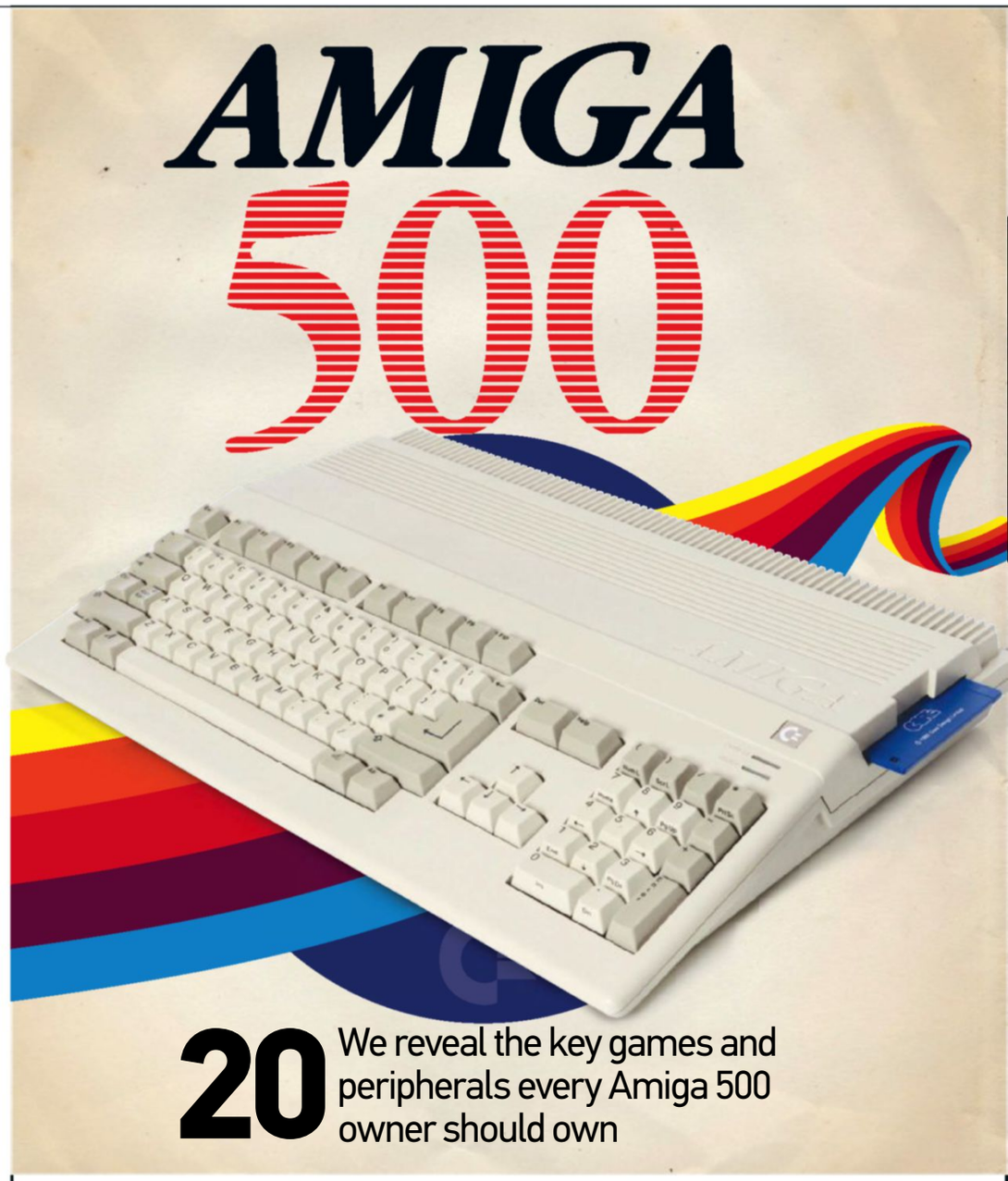
40 Classic Game Pang
Fans of hectic arcade games are well catered for with this frustratingly fine-tuned offering from Mitchell Corp

42 The Mysterious Crash
Marty Goldberg recounts the impossibly fast rise and dramatic fall of electronic handheld games

60 A Small History Of Micro Machines
David Darling and series creator Andy Graham look back at the popular top-down racing franchise

70 Conversion Kings
Classic developers reveal the process behind converting classic arcade games to popular home micros

78 Minority Report Special Commodore 16
Our latest Minority Report focuses on the popular C16. How many of the revealed games did you play?



20 We reveal the key games and peripherals every Amiga 500 owner should own

RETRO REVIVALS

50 Theme Hospital
We revisit Bullfrog's classic sim game, where the cure was often as bad as the actual disease

96 Moon Patrol
Stuart Hunt puts on his space boots and takes one of Irem's earliest arcade games for a spin

In the hot seat this month...

48 SCOTT ADAMS
The text adventure guru has been designing games for years. Find out about his latest release and how he feels about the industry

90 STEVE KELLY
He would go on to form the Bitmap Bros, but before that Steve Kelly worked at Psion. Discover how he created his early Spectrum hits and what it was like working for the 8-bit company

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> **"A progressive action RPG that still feels impressive"**
>
> Samuel Roberts

68 Future Classic

Samuel Roberts reveals why you should play Level-5's epic sci-fi RPG *Rogue Galaxy*

82 Shadowfire

Denton Designs reveals key facts about its unfinished trilogy

34 Planescape: Torment

Chris Avellone reveals the creation of one of gaming's greatest RPGs

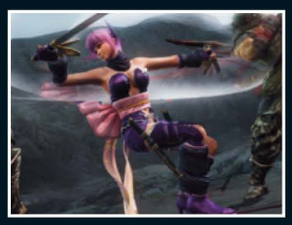
52 20 great videogame bosses

We reveal the best boss encounters of all time

ESSENTIALS

6 RetroRadar
13 Retro Diary
14 Back To The Eighties
16 Back To The Nineties
58 Subscriptions
104 Homebrew
108 Letters
111 Next Month
114 End/Game

RETRO RATED

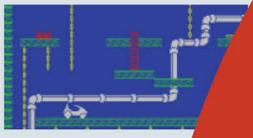


98 The Lords Of Midnight
100 Ninja Gaiden III: Razor's Edge
101 The Cave
102 Wreck-It Ralph
102 After Burner Climax
103 Leisure Suit Larry: Greatest Hits & Misses!
103 Balloon Fight
103 Hitman Trilogy
103 Rayman Jungle Run
103 Scribblenauts Unlimited
103 DmC: Devil May Cry

retro GAMER.net READER'S REVIVAL

18 CHUCKIE EGG 2

Retro Gamer reader Andrew Hunt is a big fan of Nigel Alderton's sequel. Here he explains why this underrated game still has so much to offer.



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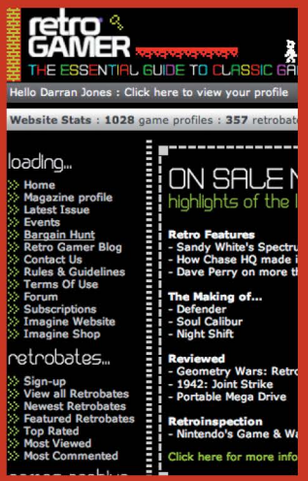


retro radar

>> GIVE US TWO MINUTES AND WE'LL GIVE YOU THE RETRO WORLD

>> After a shaky start, Nintendo announces new Wii U games, and many of them are based on classic franchises. Other news of note this month includes The 90's Arcade Racer hitting its Kickstarter target, more news on From Bedrooms To Billions and the sad demise of THQ

[Wii U] The GameCube epic *Wind Waker* is receiving a HD remake. Coming autumn, it will be entirely redone, complete with new assets and striking new art style.

CONTENTS

6 READERS GIVE THEIR VERDICT ON WII U
Nintendo announces classic retro franchises and downloadable games for Wii U

8 IAIN LEE
Our resident columnist recalls his bizarre schooldays take on *Space Invaders*

9 FROM BEDROOMS TO BILLIONS RETURNS
Nicola Caulfield explains how Kickstarter will help finish her exciting retro documentary

10 PAUL DAVIES
The ex-editor of *C&VG* muses on the ever-changing state of the games industry

12 THE 90S' ARCADE RACER
We take a look at the love letter to Sega racing games that just received its Kickstarter funding

12 THQ
After 24 years ,Toy Head Quarters finally shuts shop for good

READERS GIVE THEIR VERDICT ON WII U

WILL NEWS OF HIT FRANCHISES HELP?

A console is only as good as its games, and this is especially true if it shares a large proportion of its library with rival machines. Now while this seems to be the Wii U's strongest card – with exclusives coming from Nintendo with Wii U tailored product – it feels like a card Nintendo is still yet to play. The Wii U is now a few months old and so far all we've seen from the developer is *Nintendo Land* and *New Super Mario Bros U*. Though both are fun and polished games, where are the must-own Nintendo games to really show off the tech and functionality of its new machine? Where's the Wii U's *Super Mario 64* or *F-Zero*?

In its most recent Nintendo Direct presentation Nintendo outlined a literal game plan for its new console, giving details of the incoming Wii U titles that will be arriving this year. While most of Nintendo's home-grown announcements held little in the way of shock value, it looks like a promising next phase of the Wii U's first year – if the games deliver of course.

Two *Zelda* games were announced, and one of those will be a HD remake of *The Legend Of Zelda: Wind Waker*. Showing comparison screens to whet the appetites of fans, Nintendo unveiled its plans for the striking new art style it's applying to the game, one that appears to tone down the original's cel-shaded look of the characters (which sadly makes them less cartoon like in

The Magnificent Seven

>> The classic games that make up Nintendo's Wii U Virtual Console Campaign

Balloon Fight (NES)
Available 23 January to 21 February

F-Zero (SNES)
Available 20 February to 21 March

Punch Out!! Featuring Mr. Dream (NES)
Available 20 March to 18 April

Kirby's Adventure (NES)
Available 17 April to 16 May

» [Wii U] *Pikmin 3* remains greatly anticipated by Nintendo fans. It's been nine years since part two.

appearance), but emphasises the level of detail of the world, which, from the examples demonstrated, look incredible.

Retro Gamer reader Slick2097 is particularly pleased with the news of *Zelda HD* revealing, "I actually still play *Wind Waker* on my Wii (GC backwards compatibility obviously) and its upscaled by my amp to 1080p which looks very good. However the screen grabs I've seen make it look absolutely gorgeous. This is the only game which has got me seriously interested in a Wii U.

Not everyone is convinced however, with Snowkatt revealing, "Personally I'm just sick and tired of the same franchises being trotted out again and again by Nintendo. A new *Mario* or *Zelda* game used to be something special and happened only once or twice each console. Now you are flooded in the things."

Zelda wasn't the only classic franchise to receive an update, with Nintendo announcing a brand new 3D *Mario* title from the *Super Mario Galaxy* creators, which would be in playable form at this year's E3 in June. Another title sure to generate a long cue from the Nintendo stand will be *Mario Kart's* Wii U debut, which will also be in playable form. What may not be playable (but could possibly be unveiled) is the next instalment in the *Smash Bros* series, which was also announced but was in too early a state to reveal.

Additional reveals included a sequel to *Kirby's Epic Yarn*, but starring Yoshi and a collaboration with Atlus to bring a new RPG to the machine, one which will have connections to both the *Fire Emblem* and popular *Shin-Megami Tensei* franchises.

But are these classic franchises enough? Adippm82 isn't sure saying, "There is nothing on the system that interests me enough to get over the initial outlay of the console, the first time since the SNES days I have no plans to buy a new Nintendo console."

"It's all well and good if you like *Mario*, *Zelda* and the other usual suspect franchises," continues Joey, "but what if you're not interested in those, but are in Nintendo's other forgotten about franchises such as *F-Zero* and *Star Fox*? Then there isn't much to get excited about. I mean how isn't there an *F-Zero* game on the 3DS already? What an awesome game that would be to show off the 3D capabilities of your handheld... Crazy!"

It would appear that some readers are more than happy with the direction Nintendo's console is heading in though with ZXSabreman telling us, "I am very excited at watching the Wii U develop into something very special, I can play wonderful feel good games like *Mario U* or lock and load in *Black Ops II*.

"I feel the future is very bright for Nintendo, the Wii U is a wonderful piece of kit so for the foreseeable future I will be watching with interest titles like *Monster Hunter 3* and *Pikmin 3*. I am sure Nintendo have plenty of stuff in the pipeline. I am also looking forward to downloading the SNES version of *F-Zero* next week for 30p"

The download ZXSabreman refers to is a new celebration to mark the 30th anniversary of the original Famicom. Nintendo is releasing a series of Famicom/NES and SNES classics for only 30p on the Wii U eShop. There will be one every month up to July (the month of the console's launch). Wii U users will also be able to transfer already purchased NES and Super NES titles to the console absolutely free of charge, or purchase 'enhanced' versions for a discounted price.

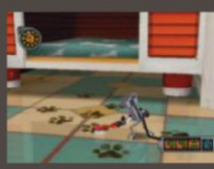
The Wii U certainly has great potential and Nintendo has a slew of classic franchises to draw upon, but current reaction suggests that its potential still needs to be fully realised.

High-Def Hopeful

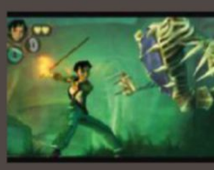
>> Wind Waker HD is happening, but we would love these remade as well

Super Mario Sunshine
Okay, so it wasn't Mario's finest hour (only by his high standards mind), but you can't dispute *Sunshine* didn't look very pretty. Now just imagine how good it would look redrawn in HD visuals. More pretty we suspect.

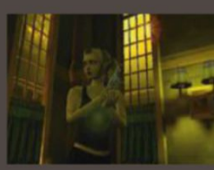
Chibi-Robo
A quirky hidden gem in the GameCube's library, *Chibi-Robo* sees a tiny robot house servant cleaning and tidying a large house. It's essentially *Wall-E* meets *Toy Story* meets a videogame.



Beyond Good & Evil
A sequel to Michel Ancel's epic action-adventure has been in the works for some time. It's currently branded a next-gen game and heading for Wii U. Until then though, an HD version of the original will do.



Eternal Darkness: Sanity's Requiem
One of the most atmospheric and original survival horror games within the genre, we yearn for a sequel. Actually scrap this whole HD remake thing and just give us that sequel.



F-Zero GX
There's hasn't been an *F-Zero* game for ages (*Nintendo Land's Captain Falcon's Twister Race* doesn't count). We reckon Nintendo will remedy that on Wii U, but we'll settle for a remake in the meantime.

"Nintendo is releasing a series of Famicom/NES classic for only 30p on the Wii U eShop"

Super Metroid (SNES)
Available 15 May to 13 June

Mario & Yoshi (NES)
12 June to 11 July

Donkey Kong (NES)
15 July to 13 August

» [Wii U] It's not got an official title yet, but we're guessing *Yoshi's Epic Yarn* has a good chance of getting chosen.

retro columns

>> RETRO RECOLLECTIONS WITH CELEB IAIN LEE

Here's the bio...
Iain Lee has been a fervent gamer since he was tiny. And that was a long time ago. In between playing computer games and collecting crap from eBay, he has presented Channel 4's *The 11 O'Clock Show* and *Rise*, and currently does bits of stand-up as well as presenting the *2 Hour Long Late Night Radio Show* on Absolute Radio at 11pm.

SCORE<1> HI-SCORE SCORE<2>

I.L

Hi there, my name's **Iain Lee**. You might remember me from Thumb Bandits, The 11 O'Clock Show and Absolute Radio, but now I'm here to confess my love for retro

Space Invaded?

My little boy is nearly three. Being dead middle class and living in North London, I take him to tennis lessons. He loves it. When he focuses, that is. Hey, he's two. It's tricky for the poor lad. But he gets a kick out of it and enjoys it a lot. I personally consider it an investment.

I don't mind paying a few quid and spending a couple of hours a week taking him because I know that when he is the new Andy Murray or another famous tennis player – I don't really follow sport so I can't think of any other tennis men. I know the Venus sisters, but that's it. Oh, I also know British Canadian Greg Rusedski, but he was rubbish. Nice smile though – he will buy me a mansion and let me bathe in champagne. He has to do that for me. He's signed a contract.

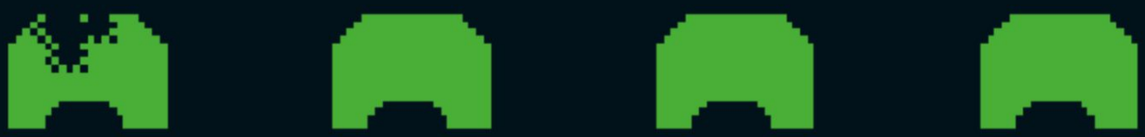
Anyway, stick with this self-indulgent twaddle because it does have something to do with old games. Honest. One of the training techniques they use at this tennis club reminded me of a game I used to play as a kid when I couldn't get near a computer. It was a real life version of *Space Invaders*. The yoofs of 2012 play it slightly differently to the yobs of 1982. Nowadays, it involves children running across a tennis court while an elderly lady gently rolls a tennis ball at their feet trying to catch them with it.

When I were a lad, it was a bit more robust than that. We didn't have no health and safety bollocks to interfere with our life threatening fun and the school playground really was like a battlefield.

1982 *Space Invaders* involved about 20 kids stood in front of a brick wall. You had to walk from left to right sideways, so you were facing the front, at quite a steady pace. The real enthusiasts also attempted to recreate the electronic bleeps of the computer invaders. While all this was going on, one lad would stand about 15 feet away and lob a tennis ball as hard as he could at the children moving from side to side. And man, did he lob it. If it hit you, you would leave the pack and join in with the chucking, ideally with your own ball.

By the end, you had 19 lads (girls never took part in this, they were too busy doing some kind of voodoo with a million elastic bands) chucking about 16 balls at one poor sod who was now wishing he hadn't 'won' the game because he knew this was going to hurt. And people did suffer injuries. I once saw Bob T, a tough lad, get hit so hard in the nuts he had to go to hospital. Instead of being concerned for his health and apologising, we all cheered the skill of the ball thrower and called Bob a massive idiot. I know. I'm not proud, I'm just using this to illustrate how thoroughly horrible kids are.

I wonder if game designer Tomohiro Nishikado ever knew that his wonderful game once sent a child to hospital with bruised balls?



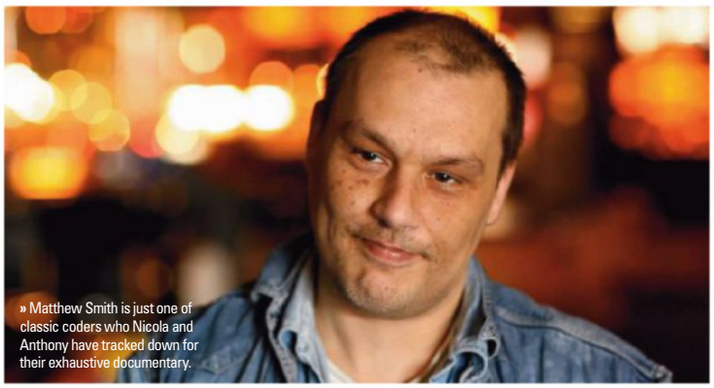
1982 Space Invaders involved about 20 kids stood in front of a brick wall

3 CREDIT 05

FROM BEDROOMS TO BILLIONS RETURNS

NICOLA CAULFIELD ON THE NEXT PART OF HER EXCITING RETRO DOCUMENTARY

We've already covered *Bedroom To Billions*, but things have taken an exciting new turn for the epic documentary. After successfully securing funds to ensure all principal photography was in place, Nicola and husband Anthony are now turning to Kickstarter to further assist the film.



» Matthew Smith is just one of classic coders who Nicola and Anthony have tracked down for their exhaustive documentary.

Why use Kickstarter?
As is common with films financed via crowdfunding sites, funding is also needed to enhance the film, secure archive footage, stills, music usage and clearances. We are also working with The Pickford Pros to produce graphic sequences and imagery to help us depict certain stories better. To achieve this we've launched a second campaign, as without these crucial elements the film would simply be two hours of talking heads and not the true and lasting documentary that the subject matter deserves.

What perks are you offering?
[In addition to] pre-buying the film on multiple formats like DVD/Blu-ray, we also have some incredibly rare and limited numbers of signed boxed computers and games from the likes of Matthew Smith, David Braben and Rob Hubbard. We really hope these fantastic perks will attract interest from the community. We are also featuring exclusive new clips from the film and more info on why we need the funding.

How many interviews have you secured in total?
I think it safe to say when we're all done we will have over 50 interviews. There are many key people in the UK video game industry story so we need to get as broad a picture as possible. We are filming all the time, but recently inerviewed with Gary Penn, Fergus McGovern, Eugene Lacey and Matthew Smith.

Is it true that classic C64 coders are composing the music for you?
We are currently working with Rob Hubbard, Ben Daglish and hopefully also Martin Galway to produce all-new music specially for the film. What was interesting was their desire to create all new music, no remixes of past compositions except for perhaps one very special tune that may surprise a few people.

What's been the most eye-opening interview so far?
Without a doubt Matthew Smith. It took nearly a year to finally get the interview locked down so we've made a mini-movie of our journey to see him. The interview itself lasted for well over two hours and was funny, shocking and at times incredibly sad. I think what our interviewees discover while filming is that we want to learn what really happened back then, how it all began, how it felt when the success started, but also the other side such as what was it like when the industry began to change, we really have heard some incredible stories.

Why is this documentary so important to you?
Simply because it's a culmination of over ten years work. We've always wanted to tell the story of the UK videogames industry. What happened in that golden period is an important British achievement full of talented people who inspired a whole generation of youngsters to follow in their footsteps. It must be documented while the majority of key people are still alive to tell the tale. We were told by British Broadcasters that videogaming is too niche a hobby and no one would watch it. We believed this to be wrong so we decided to raise the funds ourselves through a crowdfunding campaign. People did want to see this film made because they believe like us that this story must be told.

» Rob Hubbard will be helping out with the soundtrack for *From Bedrooms To Billions*.

You can find out more information about *From Bedrooms To Billions* on Kickstarter.com right now.

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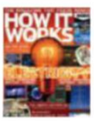
All About Space

In issue 9 of **All About Space** you'll join the search for life and meet the five most important people who are searching for extraterrestrials. There's an in-depth feature on Neptune, a history of the ten greatest space discoveries, and a futuristic article on faster-than-light travel.

games™

Issue 132 of **games™** counts down the arrival of the next generation consoles, covering everything from PS4 and the new Xbox, to Oculus Rift, Ouya and Steambox. Main reviews focus on *Metal Gear Rising : Revengeance, Aliens: Colonial Marines*, while the retro section goes behind the scenes of *Total Annihilation*.

How It Works



In issue 44 of **How It Works**, we're investigating electricity: how it's generated, how it gets to our home and most of all, what exactly is it made of? We reveal out how NASA builds a 400-ton space station in space, and how 55 billion cubic metres of gas is transported across Europe in the world's longest gas pipeline.

Apps Magazine

This issue we give you a definitive list of the best apps ever for iPhone, iPad and Android, as well as feature over 450 new reviews. We also try to create the most streamlined and supercharged smartphone possible using just Google apps, and compare mobile games.

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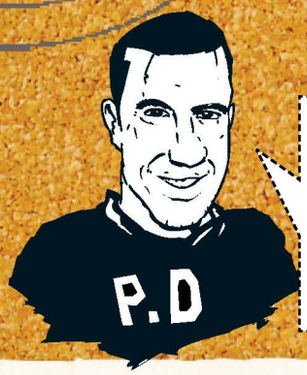
retrocolumns

>> PAUL DAVIES GIVES HIS VIEWS ON THE RETRO WORLD

Here's my bio...
In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.



Hello, retro gamers. My name is **Paul Davies**. I used to be the editor of C&VG and have also worked on a number of classic gaming magazines over the years

Reasons to be cheerful

The recent fuss over frame-rate in Peter Jackson's *The Hobbit* reminded me of how much technical jargon I've been required to absorb just to express my likes and dislikes in gaming. Before teh internets, and the minds of the masses publicly exposed, I used to enjoy hearing conversations between punters on in-store demo pods, or crowding the counter at my local indie.

Inside of the fewest possible words, but delivered with rapier wit, the truth about the newest games was invariably revealed. *PC Gamer* or *CVG* might've waxed lyrical about Bullfrog's *Magic Carpet* or Nintendo's *Pilotwings*, but a mere "Shit!" would sum it up, with a guffaw, for the assembled throng. Meanwhile, back in hand-wringing journo land, assuming a frail mantle of intelligence, we writers were reaching for correct words to describe such simple fare as *Earthworm Jim* and *WipEout*.

Collision detection was probably the earliest technical issue I observed. It was a particular bugbear of my boss Julian Rignall who'd regularly scream "Collision!" in exasperation at a game that didn't play fair. Prior to joining *Mean Machines* I'd rather enjoyed Disney's *Fantasia* on the Mega Drive, but later realised its collision detection was absolutely rotten.

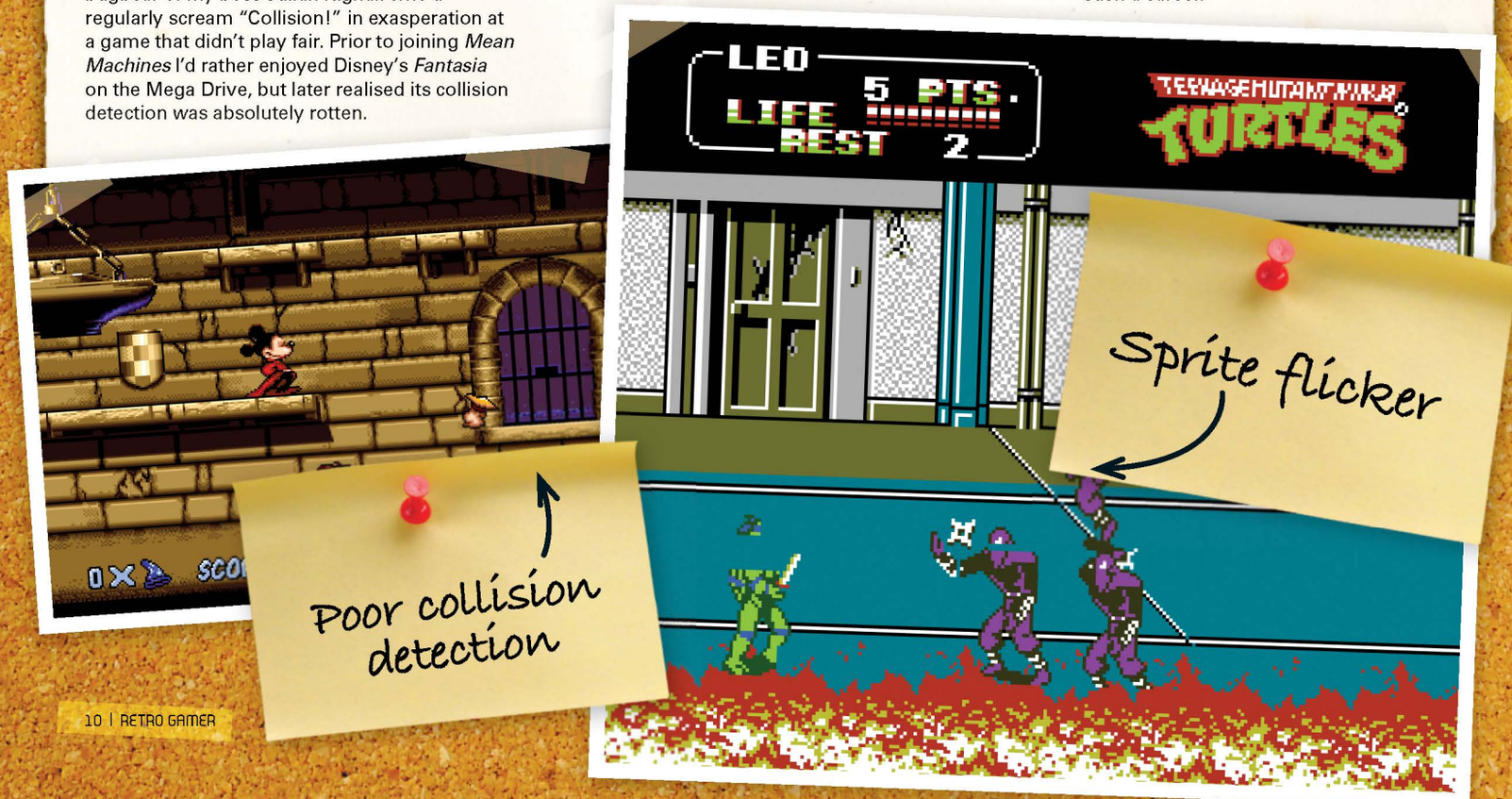
Second to collision was sprite flicker – the bane of any game that dared beyond its fair share of on-screen clutter. It didn't often spoil the gameplay, for example with *Super R-Type* on Super NES, but it was a clear reason to downgrade the graphics rating a few percent. On the subject of *Super R-Type*, another killer was slowdown. I'd never given this much thought either when trying to complete *Super Mario World, Marvel Land, Super Aleste* or *Zero Wing*. Once it became a Thing though, I was seeing it everywhere. Even the awesome *Viewpoint* for Neo Geo AES got hammered for this!

The point at which I remember thinking it all got silly was with the advent of polygon-based consoles. We had jaggies to fear (basically straight lines that appeared saw-toothed), pop-up, fogging, and – my favourite – shoddy mipmap interpolation. If it was trilinear it was probably okay. But to this day I couldn't tell you exactly what it was! Richard Leadbetter could though. Still can.

CD-Rom also meant a ton of FMV (Full Motion Video) to complain about. On the Mega-CD it was horrific, but a novelty, so all amazing. On PlayStation and Saturn, however, there was a battle to be fought (that PlayStation won), oh and meanwhile the big deal over transparency. The Saturn couldn't do this for shit, neither could N64 very well, but transparent pantaloons and energy shields were to die for on Sony's machine. *Star Gladiator* really went to town with this.

Racing games were plagued by dodgy draw distance. Fighting games ruined at the drop of an animation frame. Loading times, fair enough, continue to bother a lot of gamers mashing the start button to get back in the action.

To make ourselves feel happier, games journos would play something with lovely lens flare or impressive, multi-layered parallax scrolling. We'd raise a glass to impressive sprite rotation in the Nineties, or bump mapping in the new millennium. Makes it so much harder to just drive a thing, shoot a thing, and/or save a thing after such a career.



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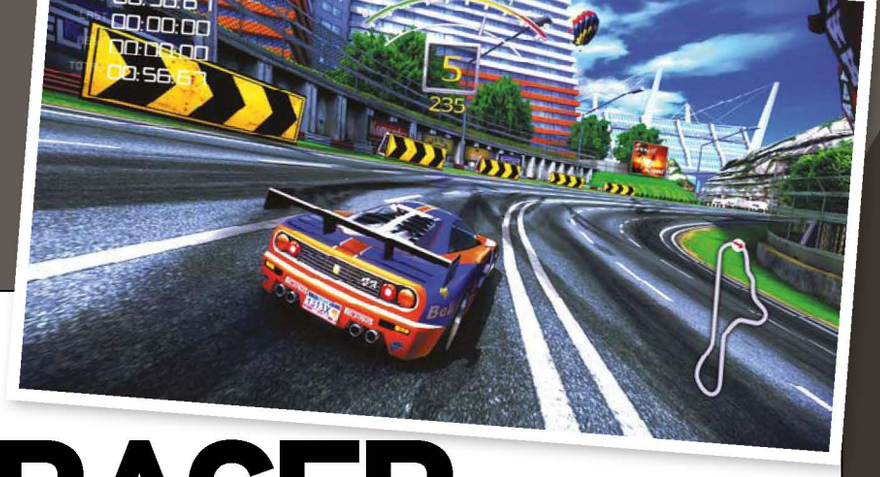


THE 90'S ARCADE RACER

KICKSTARTER PROJECT PAYS TRIBUTE TO CLASSIC DRIVING GAMES

» [PC] *The 90's Arcade Racer* looks amazing. We've already pledged our support for it.

While it's easy to become cynical about yet another Kickstarter-funded game, Antonis Pelekanos' new project really excites us. The talented artist is a huge fan of classic Sega racing games (he recently worked on *Sonic All-Stars Racing Transformed*) and has recently secured funding to make a new racing game that pays tribute to classics such as *Daytona USA* and *Scud Race*.

The 90's Arcade Racer features three different cars (Supercar, Stock and Formula One) and three tracks, each with a normal and mirror mode. Not bad for a tenner. The core game modes will simply focus on time attacks and simple races, but a Championship Mode, leaderboards, day and night stages and a possible multiplayer are also planned if it achieves its £20,000 stretch goal.

Early videos and screenshots suggest that this is easily going to capture the spirit of those classic racers, and US developer Nicalis has recently announced that it will be lending additional support and that the game will also be appearing on iOS, Android and Wii U in addition to the PC and Mac versions that were originally planned. Expect a review and an interview with Antonis later in the year.

THQ NO MORE

CLOSING ITS DOORS AFTER 24 YEARS

THQ, the company behind such franchises as *Saints Row, Red Faction* and *Darksiders* has finally closed its doors. The company was first formed in 1989 and was known as Toy Head Quarters. While its background was in the manufacturing in toys, it soon began to make headway into videogames, particularly licensed games such as *Home Alone, The Adventures Of Rocky & Bullwinkle And Friends*, and eventually secured the lucrative WWF and WCW licences.

It continued to work on licences while introducing a number of new IPs. Despite numerous studio acquisitions ranging from Heavy Iron Studios to Vigil Games and Relic Entertainment, THQ was unable to compete with bigger publishers and began closing down and rearranging studios from 2008 onwards. A sad end to a legacy that ran for nearly a quarter of a century.

BREAKDOWN WHO GOT WHAT AND WHAT THEY PAID...

Relic and Company Of Heroes franchise
Sega for $26.6 million

Evolve IP
Take-Two Interactive for $10.9 million

South Park: The Stick Of Truth rights
Ubisoft for $3.3 million

Homefront IP
Crytek for $500,000

Volition and Saints Row IP
Koch Media for $22.3 million

Metro: Last Light
Koch Media for $5.9 million

THQ Montreal
Ubisoft for $2.5 million

Vigil Games and Darksiders IP
No sale

retro diary

2 March – 27 March

>> A month of retro events both past and present

5 March 2013
■ Due for release on PS3, Xbox 360 and PC is the new *Tomb Raider* game from Square Enix which explores the origins of Lara Croft.

6 March 1981
■ Sir Clive Sinclair launched his ZX81 home computer priced at just £49.95, by mail order only and you had to make it yourself from a kit.

8 March 1922
■ Videogames pioneer and inventor, Ralph Baer, is born in Germany.

9 March 2001
■ Sega releases the party game *Sonic Shuffle* exclusively on the Dreamcast.

17 March 2006
■ The fourth racing game in the *Driver* franchise, *Driver: Parallel Lines* is released by Atari on the PlayStation 2.

15 March 1984
■ Issue one of *Big K*, the short-lived multi-format computer games magazine produced by IPC goes on sale.

12 March 1982
■ Namco's *Pac-Man* arrives on Atari's 2600 console. Reaction is mixed; bad news for Atari considering the millions of cartridges it produced.

9 March 2012
■ Beat-'em-up giants come together in Capcom's crossover game *Street Fighter X Tekken*, released on the PlayStation 3 and Xbox 360.

19 March 1993
■ *Super Metroid* arrived in Japan and proved that the 16-bit SNES was a perfect home for Samus Aran.

20 March 1997
■ Konami releases *Castlevania: Symphony Of The Night* on the PlayStation. It's the fourteenth in the long running franchise.

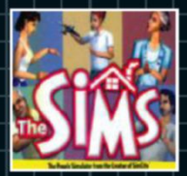
21 March 2001
■ The Game Boy Advance, the successor to the Game Boy Color is released in Japan.

21 March 2000
■ *Thief II: The Metal Age* stealthily sneaks onto the PC courtesy of Looking Glass Studios.

25 March 2001
■ Electronic Arts publish *Black & White*, a superb god simulation for PC.

23 March 2007
■ Sony's newest console, the PlayStation 3, went on sale in Europe and the UK.

22 March 2012
■ Rovio Entertainment releases *Angry Birds Space* on iOS, Windows and Android.



22 March 2002
■ The life simulation, *The Sims*, overtook *Myst* to become the best-selling computer game of all time, selling 6.3 million units.

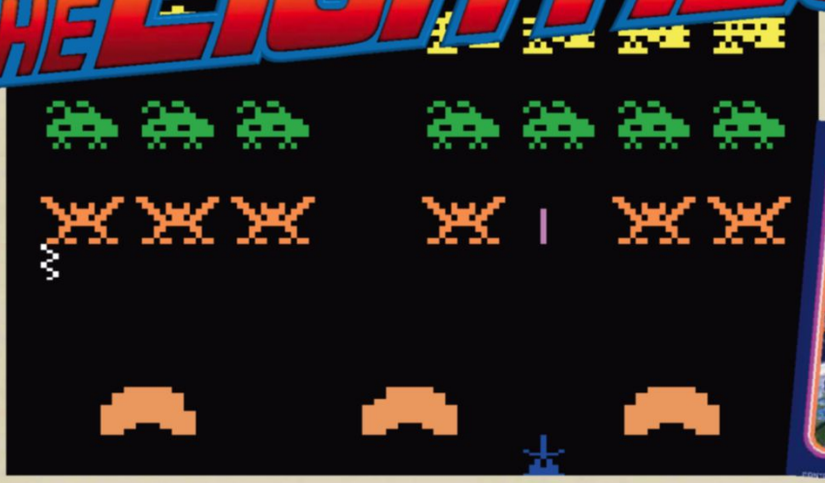
26 March 1993
After debuting on the Game Boy, Kirby moves over to the NES and gains his inhale ability.

26 March 1997
■ The awesome *Blast Corps* gets released in the US for N64. We're still waiting for that sequel…

27 March 2009
■ Leisure Suit Larry returns, this time on PS3 and Xbox 360, in *Box Office Bust* developed by Team17 and published by Codemasters.

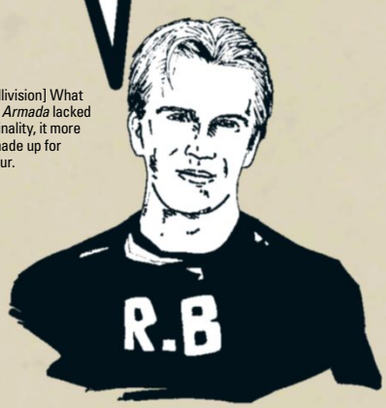
27 March 2013
■ New issue of **Retro Gamer** hits the streets.

BACK TO THE EIGHTIES



» [Intellivision] What *Space Armada* lacked in originality, it more than made up for in colour.

JUNE 1981 – Centipede hatches, Mattel's Space Armada sets sail, Nintendo's Parachute drops in, Ultima arrives, the VIC-20 marks its UK arrival while the TI99/4A is released. Richard Burton likes a little bit of toast…



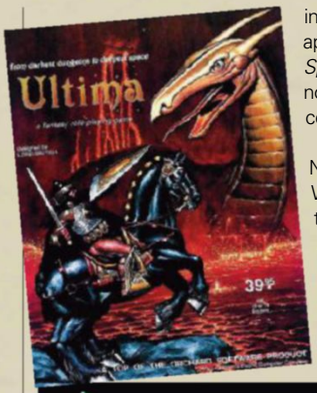
THE LATEST NEWS FROM JUNE 1981

Released into arcades by Atari during June was the classic coin-op game *Centipede*. it was designed by Ed Logg and Dona Bailey; one of the few women working in videogames design at that time.

The game itself was a simple affair and saw you manoeuvring your laser around the bottom of the playing area using the trackball, and blasting the descending centipede that weaves in and out of the mushroom field until all its segments are destroyed, all while avoiding other nasties such as fleas, scorpions and spiders.

Centipede became a worldwide hit. Understandably, further cabinet variations followed after the initial launch of the upright version with two different sized cocktail cabinets and a cabaret cabinet released over the next few months. The upright version could be yours for a mere $1995.

Mattel's answer to *Space Invaders* was released this month in the guise of the colourful *Space Armada* for the Intellivision. While following the *Space Invaders* formula very closely, there were a few interesting new angles such as your protective bunkers not regenerating between rounds. The invaders also varied their missiles on later rounds with homing missiles and bombs with a discernable blast radius and if that didn't make things hard enough, later rounds featured invisible invaders only materialising as they approach the lower levels of the screen. *Space Armada* was playable and while not the best *Space Invader*-alike, it was certainly not the worst.



In the world of handheld gaming, Nintendo unveiled the first of its Widescreen Game & Watch titles with the release of *Parachute* on 19 June. *Parachute* saw you in a boat on the sea attempting to catch parachutists as they tumble out of a helicopter. If they should succumb to a watery landing you lost one of your three lives and they are scoffed by hungry sharks. In the Game B option occasionally the parachutists get stuck in a palm tree to throw off your timing. You played continuously until your lives were lost or your thumbs spontaneously combusted after becoming blistered meaty stumps of redness. *Parachute* was a well received game that sold over 250,000 units.

» [Apple II] *Ultima* was a RPG game with atmosphere, depth and a great balance of exploration and interaction.

Equally as much fun but a lot more involved was the official release of *Ultima: The First Age Of Darkness*. The RPG involved you searching the land of Sosaria for the Gem Of Immortality, a gem created by the evil Mondain who rules the land. You had to defeat Mondain by destroying the Gem Of Immortality by going back in time to before it was made. Sosaria consists of four continents ruled over by two lords. Each continent has two castles and this is where your quests are obtained. There are two types of quest; find a location or kill a monster and once completed the lord will give you a gem. Obtain four different gems from four different continents and you can then activate the time machine… once you've found it… and complete the quest.

Ultima was released on the Apple II initially with conversions to several other systems following. It was an involved game with the gem hunting quest at the fore but with the necessary subplots to slay monsters and visit ye olde shoppes to buy magic spells. You also got to choose

JUNE 1981 NEWS

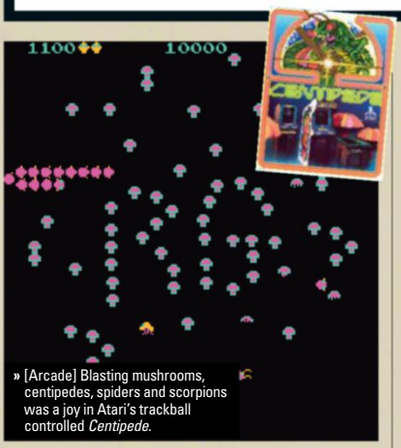
12 June saw the world premiere in the USA of an action adventure movie franchise that everyone fell in love with. *Raiders Of The Lost Ark* introduced us to the adventure-seeking, treasure-hunting archaeologist Indiana Jones, played by Harrison Ford. He is searching for the Ark Of The Covenant while battling Nazis who are tracking the artefact for Hitler who believes that whoever owns the Ark shall have an invincible army.

Produced and written by George Lucas and directed by Steven Spielberg, *Raiders Of The Lost Ark* went on to become one of the highest grossing movies of all time and regularly features in Top Ten lists about the best movies ever made. Quite something for a movie with an $18 million budget that was supposed to look and feel like a B-movie film serial from the Thirties.

Also receiving its world premiere in the US on 12 June was *Clash Of The Titans* starring Harry Hamlin as Perseus and Laurence Olivier as Zeus and which told of the story of Perseus and his battle with Medusa and the Kraken to rescue Princess Andromeda.

Of course, the real star of the movie was Ray Harryhausen's amazing stop motion model animations which were stunning. Not so stunning was that annoying mechanical gold owl.

2 June saw children's television show *Razzamatazz* first broadcast on the ITV network in the UK. 16-year-old Lisa Stansfield, who went on to become a successful singer, was a presenter on the show. Bring back *Tiswas*!



» [Arcade] Blasting mushrooms, centipedes, spiders and scorpions was a joy in Atari's trackball controlled *Centipede*.

your race, sex and class, which helped to determine your statistics for the game.

Graphically, *Ultima* was adequate, with a top-down view for the majority of the game with a switch to a first-person view when you explored dungeon areas. *Ultima* was head and shoulders above anything else at the time and it came as no surprise to find it spawned multiple sequels eventually spanning a nine game series and several spin-off titles.

If you had a spare $525 in cash then why not treat yourself to a brand new home computer released this month, the TI99/4A from Texas Instruments. While not often the first choice for a home computer, particularly for UK users, the TI99/4A could at least boast of being the first 16-bit home computer with a true 16-bit CPU. That said, only the system ROMS were connected to the 16-bit bus. A 16-bit to 8-bit multiplexer was employed for every other bit of memory and all connected peripherals, of which it had quite a selection including a 5.25" disk drive, acoustic coupler, thermal printer and a tape drive.

The TI99/4A had a look all of its own. A professional feeling keyboard sat next to the large and snappily named Solid State Software slot (that's a ROM cartridge slot). One quirky unplanned feature was that the power regulator board was sited under this slot causing that area to get very hot. Ideal for keeping your toast warm on a cold wintery night…

Despite this, the TI99/4A was a popular machine in America and sold well during its two and a half year spell in stores. With an estimated 2.8 million units sold it was certainly not a machine to be taken lightly. Unfortunately, in the UK it fared poorly and never really gained a foothold in the marketplace.

Maybe the introduction of another new computer to the UK market stole the TI99/4A's thunder when Commodore released the VIC-20 making its debut at the three day Commodore Pet Show which began on 18 June. It was what gamers and programmers were looking for at that time, a relatively cheap colour computer with a great keyboard, pretty easy to program and plenty of scope for expansion. More importantly to gamers, many software houses were ready to support it and were actively creating new games for Commodore's new machine…

» [Game & Watch] The first Game & Watch Widescreen game. Catch the thrill seekers before they end up as shark fodder.

THIS MONTH IN...

YOUR COMPUTER

It was issue one of *Your Computer*, a carefully balanced magazine covering home and serious computing with a smattering of games news and a healthy type-ins section. While not the most humorous tome to grace the newsstands, *YC* had an air of authority that the later, more irreverent magazines, lacked.

COMPUTE

Compute suffered from a concoction of dreary endless type-ins and more advertising pages than actual content. However the classic advert for the VIC-20 featuring William Shatner stood out. Modelling a magnificent beige jumper and a marvellously unwavering head of hair Shatner stated that the VIC-20 was "the wonder computer of the 1980s".

BYTE

In their What's New section, the 472-page magazine *Byte* looked at new peripherals for the TRS-80 and Apple II with a new 8-inch floppy drive. Odd considering they were old hat even then with their dinner plate-sized disks. It was yours for a smidge under $2000.

CHARTS

JUNE 1981

ACORN ATOM

1. Fruit Machine (Bug-Byte)
2. Atom Invaders (Bug-Byte)
3. Demon Dungeon (Micro Power)
4. Invader Force (Micro Power)
5. Pinball (Bug-Byte)

ARCADE

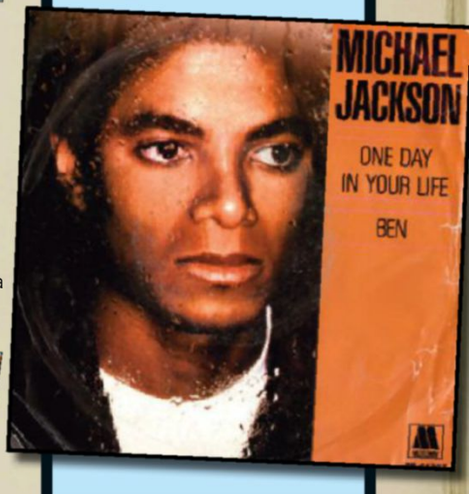
1. Pac-Man (Namco)
2. Phoenix (Centuri)
3. Missile Command (Atari)
4. Asteroids Deluxe (Atari)
5. Battlezone (Atari)

ATARI 2600

1. Warlords (Atari)
2. Pele's Soccer (Atari)
3. Video Pinball (Atari)
4. Fishing Derby (Activision)
5. Golf (Atari)

MUSIC

1. One Day In Your Life (Michael Jackson)
2. Being With You (Smokey Robinson)
3. More Than In Love (Kate Robbins & Beyond)
4. Going Back To My Roots (Odyssey)
5. Now 'Bout You (Champaign)



BACK TO THE NINETIES

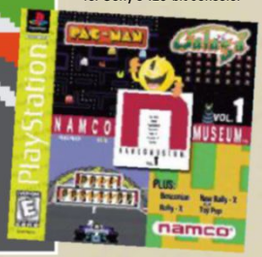
CHARTS

DECEMBER 1995

MUSIC

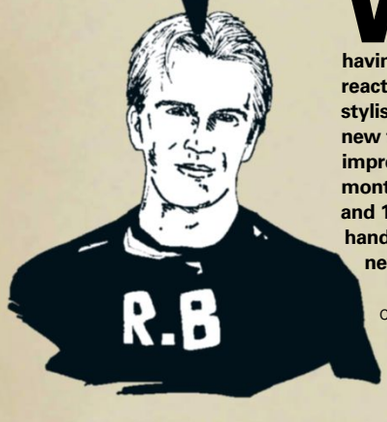
1. Earth Song (Michael Jackson)
2. Father And Son (Boyzone)
3. Missing (Everything But The Girl)
4. Gangsta's Paradise (Coolio Featuring LV)
5. I Believe / Up On The Roof (Robson And Jerome)

» [PlayStation] Namco realised its heritage quickly, releasing *Namco Museum* for Sony's 128-bit console.



THE LATEST NEWS FROM DECEMBER 1995

DECEMBER 1995 – Nintendo 64 is ultra late, Street Fighter returns, Resident Evil begins, Namco goes old school, Activision give Pitfall another run out, no score for Hyperscore and Silica Shop closes. Richard Burton gets Christmas worms…



With Nintendo's Ultra 64 official world debut at the 7th Shoshinkai Software Exhibition in Japan having passed, the resultant positive reaction to its design, three-pronged stylised controller and even the swanky new three dimensional N logo was impressive. Yet it took a further six months before it went on sale in Japan and 15 months before any European hands would get to cradle that wacky new controller.

Nintendo also confirmed that the console would alter its name from Ultra 64 to Nintendo 64 and that the change would be applied worldwide. This was to fall in line with its new policy of uniformity of console names across different territories. No more NES/Famicom confusion then…

Capcom's newest *Street Fighter* game, *Street Fighter Alpha: Warriors' Dream* was a notable PlayStation release in Japan and the USA this month. This wasn't just a reheated mishmash of leftovers from previous *Street Fighter* titles but a brand new game converted from the coin-op released six months earlier.

Street Fighter Alpha was set somewhere between the original game and *Street Fighter II*, with many of the familiar characters appearing again but looking slightly younger. While gameplay was similar with a revamped Super Combo option, the addition of the Chain Combo (allowing an attack to be interrupted mid-flow by another stronger manoeuvre) was greatly welcomed, as was the much-needed mid-air block. The PlayStation version arrived first with the Sega Saturn conversion arriving in January.

Having published *Street Fighter Alpha* in Europe, Virgin Interactive revealed it had joined forces with Capcom again to publish its new horror survival game called *Resident Evil*.

The atmospheric game began with a series of gruesome murders. Bravo team from the Special Tactical And Rescue Service (STARS) is sent to investigate and promptly disappear, so Alpha team are sent in to rescue them. Once there, they are attacked by rabid dogs that can't be killed. Alpha team take refuge in a spooky mansion where traps, puzzles and all manner of deformed shadow-lurking creatures dwell. The team later find that these creatures were created by the Umbrella Corporation with a contagion called the T-virus.

The franchise saw its debut on the PlayStation and earned critical acclaim. A Sega Saturn version was also promised although quite why it took until autumn 1997 to get that into the shops was anyone's guess. Exclusivity perhaps?

Namco decided to revisit its past, annoucing a new PlayStation compilation of seven titles from its impressive arcade back

SNES

1. Killer Instinct (Nintendo)
2. FIFA '96 (Electronic Arts)
3. Super Bomberman 2 (Hudson Soft / Virgin)
4. Mortal Kombat 2 (Acclaim)
5. Rise Of The Robots (Acclaim / Mirage)

PC

1. Destruction Derby (Sony)
2. Hexen (GTi)
3. FIFA '96 (Electronic Arts)
4. Worms (Ocean)
5. Command And Conquer (Virgin)

PLAYSTATION

1. Striker '96 (Time Warner)
2. Tekken (Namco)
3. Destruction Derby (Sony)
4. WipEout (Sony)
5. X-Com: Enemy Unknown (MicroProse)

catalogue entitled *Namco Museum*. It would go on to feature some of Namco's most famous coin-ops including *Pac-Man*, *Pole Position* and *Galaga*.

Despite a lukewarm response from the magazine reviewing fraternity, gamers seemed to enjoy the arcade retrospective and it sold well, so much so that *Namco Museum* releases became a regular fixture over the coming years with five volumes released on the PlayStation and numerous other systems over the years.

Activision and Atari decided to revisit pastures old too for an updated version of David Crane's classic *Pitfall!* game entitled *Pitfall: The Mayan Adventure* for the Atari Jaguar. You play Pitfall Harry Junior who must enter the deadly jungle to rescue his old man (which sets up a lovely gag at the end of the game).

Pitfall: The Mayan Adventure was an enjoyable side scrolling platform action game which saw you battle through 13 levels. A nice bonus was the original Atari 2600 *Pitfall!* was hidden away in the game awaiting discovery. The new game was good fun, nicely constructed and conveyed the character of the original game well. Pity it took Jaguar gamers 18 months longer than other console owners to play it…

December '95 saw a sad farewell to Silica Shop whose full page advertisements were a regular feature gracing virtually every UK computer gaming magazine throughout the Eighties and Nineties. It was most famous for its package deals on Amiga and Atari ST hardware, as well as impressively maintaining interest in lesser unloved computer systems. The adverts were a constant source of wonderment for many 8-bit computer owners enviously checking to see if the grass was greener on the 16-bit side of the computing fence.

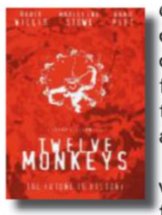
Silica Shop had gone into administrative receivership in October but only announced it this month, as it had hoped it would be a temporary measure. It blamed a bad summer of trading and the demise of Commodore for entering administration.

There was interesting news for UK-based SNES and Mega Drive gamers regularly attaining impressive high scores but with no one to share them with. New from Hasbro and yours for just £30 was the Hyperscore,

DECEMBER 1995 NEWS

2 December saw Nick Leeson, the rogue futures trader who lost £827 million speculating on the stock market, jailed for six and a half years for his part in bringing down the oldest merchant bank in England, the 233 year old Barings Bank.

25 December saw the legendary American entertainer, singer and film star Dean Martin pass away aged 78 years from respiratory failure.



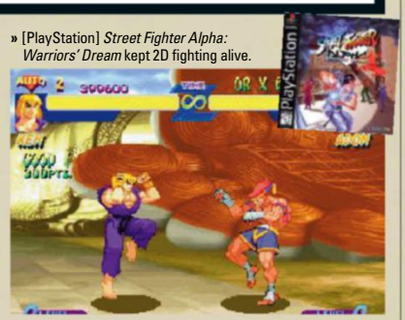
26 December was the UK premiere of the quirky comedy *Four Rooms* starring Tim Roth. The movie was split into four segments each directed by a different director such as Robert Rodriguez and Quentin Tarantino. It's based in an ailing hotel on New Year's Eve and followed the calamitous predicaments of the bellhop (Roth) with each of the aforementioned four rooms leading onto a worse and more excruciatingly awkward experience.

27 December saw the world premiere of the sci-fi thriller *Twelve Monkeys* starring Bruce Willis and Brad Pitt. Directed by Terry Gilliam, it told the story of a future Earth virtually wiped out by a man-made virus. Willis' character is sent back in time to find out about the virus and stop the impending extermination of almost all human life.

15 December saw another world premiere, this time the family fantasy action movie *Jumanji* starring Robin Williams. Having been trapped inside a magical board game for 26 years, he finally escapes after two children discover and play the game. Wild animals and dangerous situations ensue, as well as lots of mugging from Williams.

» [Sega Saturn] *Resident Evil* had several scary moments, this one in particular.

» [PlayStation] *Street Fighter Alpha: Warriors' Dream* kept 2D fighting alive.



a cartridge peripheral that you plugged your game into. You would then play your game, set a humungous total which would then be saved on the Hyperscore. You then telephoned a special number which let you upload your scores via a speaker built into the Hyperscore.

Your scores were then compiled, collated and added to the national high score tables, all of which were viewable on the *Hyperscore* page on *Digitiser*, the Teletext based videogames magazine that ran on Channel 4. Simples.

Sadly the *Hyperscore* lifespan was brief when gamers discovered that it rarely worked properly. Hasbro recalled all the units and compensated disappointed owners with an item from its toy range.

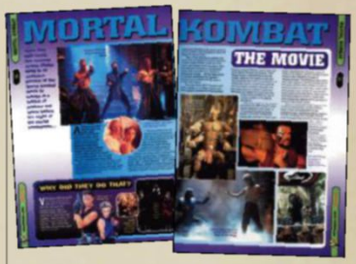
Several systems already enjoyed bouts of worm-on-worm action with Team17's popular strategy game *Worms*, and now PlayStation owners were thrilled to learn that the season of eggnog and over-eating would also bring them a goodly dose of worms too.

The turn-based strategy game saw you pit your team of worms against another with an impressive arsenal of artillery. The last worm standing wins it for their team… assuming worms can stand…

THIS MONTH IN...

SUPERPLAY

Superplay reviewed the new *Mortal Kombat* live action movie. Readers were left fearing the worst after the hopeless *Street Fighter* and the unadulterated heap of rubbish that was *Double Dragon*, but surprisingly, *Mortal Kombat* turned out to be an enjoyable albeit silly romp.



SEGA SATURN MAGAZINE

A review of the eagerly awaited *Virtua Cop* featured and scored extremely well; despite its very linear gameplay and the relative ease that the game could be completed. There was no denying the quality of the gameplay however, so *Virtua Cop* received an extremely healthy 96%.

COMPUTER & VIDEO GAMES

Unusual game of the month must surely be Sega's 32X title *Kolibri*. You played a hummingbird that must save the Earth from a crystal intent on destroying all life. It was full of bonkersness yet only mildly playable. At least it had the accolade of being the best hummingbird-based shooter around…

retro GAMER.net READER'S REVIVAL

Chuckie Egg 2

RE-EGGSAMINING HARRY'S SEQUEL

#59

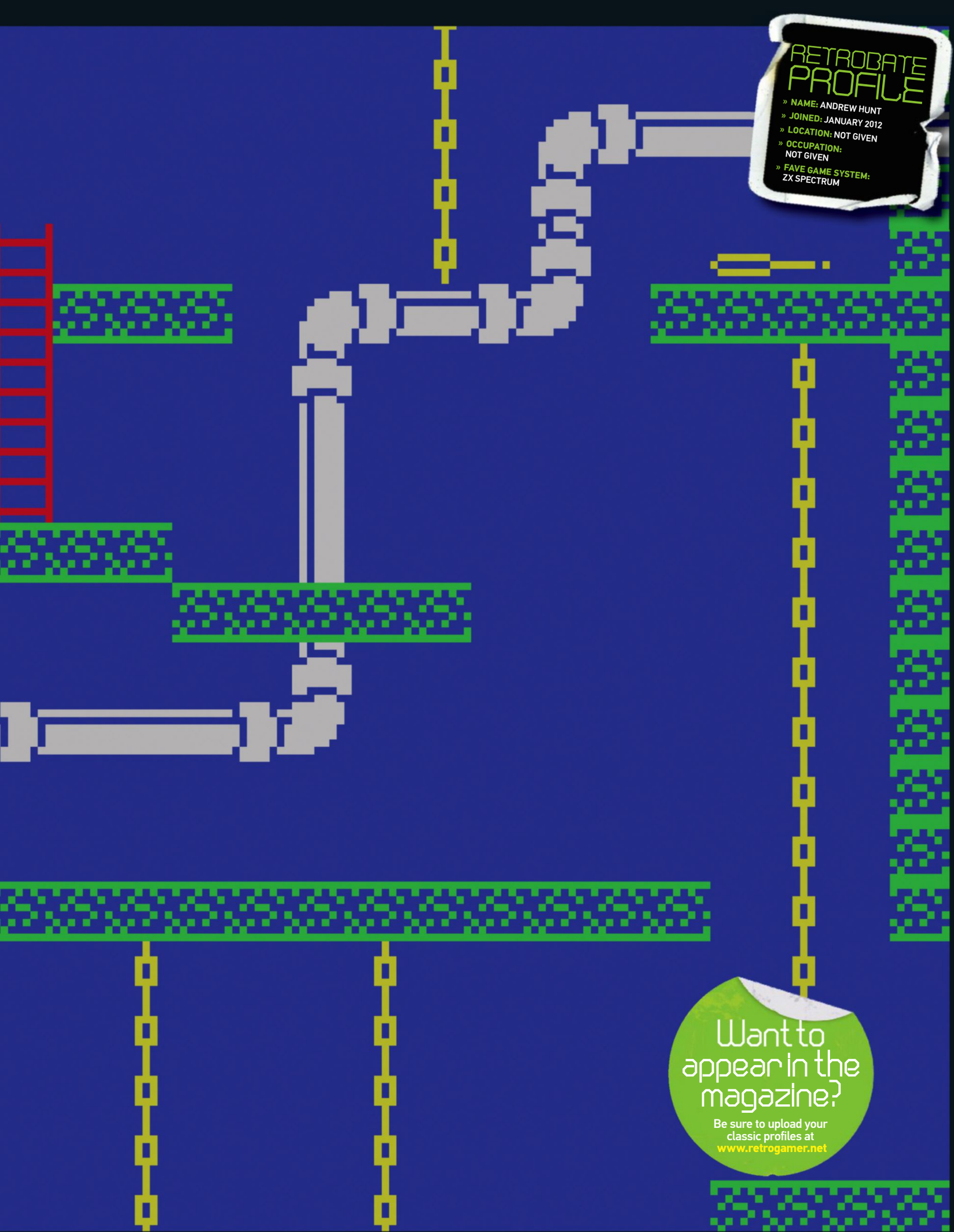
» ZX SPECTRUM
» A&F SOFTWARE
» 1985

Poor unloved *Chuckie Egg 2*. It wasn't *Chuckie Egg* so nobody liked it and it wasn't *Jet Set Willy* so nobody liked it. And yet it had so much more to offer!

For those few of us (possibly just me) who weren't exactly blown away by the original *Chuckie Egg*, and found *Jet Set Willy* to be too difficult (curse that Forgotten Abbey!) *Chuckie Egg 2* was just the thing. And for those of us (possibly just me) who loved the platformer *Fahrenheit 3000*, it had some of that 'bouncing off walls' action – and if you've seen the size of Henhouse Harry's pot-belly this will come as no surprise, coupled with another pair of ridiculously animated legs that pack an enormous punch, jump-wise.

Henhouse Harry has moved on from the poultry business and is now helping out in a chocolate egg factory. This is a game that feels so well designed; the rooms link together so neatly it's almost beautiful. The way the puff of smoke rises through the factory from the Reject Egg Smelter makes it feel like a fully imagined world (to me at least, living in my only partially imagined world).

My only niggle is the set of linear opening screens that you have to work through to get into the game proper. I found this irritating but in a spirit of generosity I now choose to think of these as the kind of hand-holding tutorial screens that you have to go through in modern games. *Chuckie Egg 2*, a game way ahead of its time!


RETROBATE PROFILE
» NAME: ANDREW HUNT
» JOINED: JANUARY 2012
» LOCATION: NOT GIVEN
» OCCUPATION: NOT GIVEN
» FAVE GAME SYSTEM: ZX SPECTRUM
Want to appear in the magazine?
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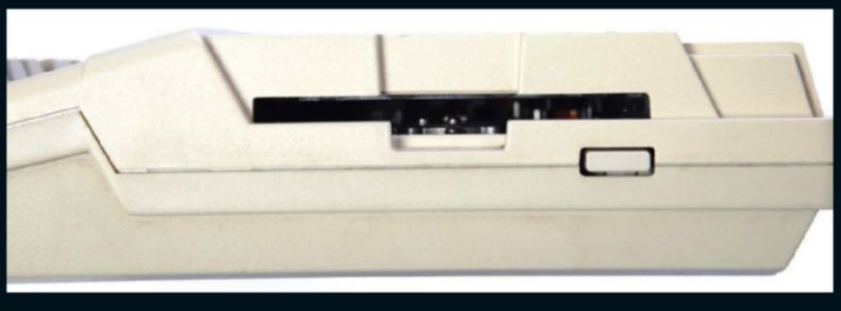
AMIGA 500 The Collector's Guide

The Commodore Amiga 500 is one of the most popular 16-bit home computers of all time with literally thousands of games available for it across a wide range of genres. Damien McFerran reveals the best games and peripherals to start off your new collection, or enhance your existing one

AMIGA

» **Manufacturer:** Commodore » **Models:** Amiga 500, Amiga 500+ » **Launched:** 1987 » **Country of origin:** United States

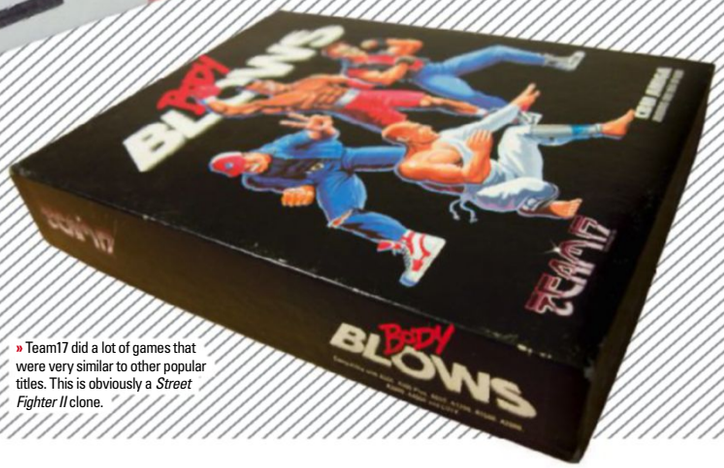
500



AMIGA 500 The Collector's Guide

» An example of the Amiga 500's distinctive looking box art. Later packs focused on games.

» The mouse proved to be just as good at playing games as it was navigating spread sheets.



» Team17 did a lot of games that were very similar to other popular titles. This is obviously a *Street Fighter II* clone.

Why it's collectable

Following up on a machine as commercially popular as the Commodore 64 was never going to be an easy task, but few would argue that the Amiga wasn't a worthy successor. 1987's iconic Amiga 500 would secure the line's status with some of the finest 16-bit games of the era, making it ideal for collecting, while thousands of kids discovered that the computer bought to help with their homework was more than capable of competing with rival platforms of the time.

The Amiga 500's custom chipset was the reason for its immense power; a selection of co-processors handled tasks such as audio and video, leaving the main CPU free for other functions. The Amiga was also able to play back sound samples, making it a popular choice for coding demos and bedroom music makers and giving it an aural edge over its rivals. Like many home computers of the time, Commodore's machine wasn't explicitly intended to play games.

The Amiga's predecessor – 1985's Amiga 1000 – was aimed at business types and was supposed to compete with Apple's Macintosh, but like so many computers of the period, it ran games as well. However, due to the popularity of Atari's ST, many of the titles produced for the 1000 were straight ports of existing ST titles, which meant they failed to harness the power of the cutting-edge hardware within the system. To make matters worse, Commodore fumbled the promotion of the computer and poor sales forced a rethink – resulting in the birth of the 500 – a "cut-price" Amiga 1000 and the system which would ultimately shape the future of the brand.

Due to the dominance of IBM-compatible PCs and Apple Macs in North America, the Amiga 500 was not a massive success in that region. It was Europe where it achieved its greatest commercial triumph, thanks largely to the fact that consumers were keen to upgrade from their outdated 8-bit machines, such as the ZX Spectrum and C64. The Amiga 500 fought off stiff competition from its rival the Atari STE, and as the Nineties dawned, scored a number of high-profile exclusives like *The Chaos Engine*, which would prove so successful they would be subsequently converted to the emerging Japanese home consoles. They remain popular with collectors to this day.

Although the Amiga 500 was clearly a more mass-market machine than the Amiga 1000, Commodore was still reluctant to promote it as a gaming platform. However, in 1989 saw a price drop (£499 to £399) and the release of the all-important *Batman Pack*, which would enable the system to shift a respectable one million units in the UK that year. More game-focused hardware bundles followed (and are now highly collectible) making it clear that the Amiga 500 was just as serious a gaming platform as its console rivals.

The Amiga 500 was ultimately responsible for fostering the talents of studios such as Bullfrog, Team17, Sensible Software, DMA Design, Factor 5, The Bitmap Brothers and Psygnosis. Titles such as *Speedball 2*, *Populous*, *Sensible Soccer*, *Cannon Fodder*, *Turrican*, *Lemmings* and *Worms* all found initial

» Amiga games often came in huge boxes. They look lovely, but can make storage an issue for bigger collections.

» The Amiga 500 had plenty of magazine support during its life time, ranging from *Amiga Power* to *Commodore User.*

» The Amiga 500 used floppy disks. Many games would often require multiple disks, so check for missing ones when buying.

Did you know?

■ If you're serious about collecting for the Amiga 500 then we suggest you consider aiming for a complete Team 17 collection. The developer was extremely prolific on Commodore's machine, releasing a lot of high quality games like *Super Frog*, *Alien Breed* and the massively succesful *Worms*, often in distinctive, recognisable packaging. Ignoring AGA variants there are just under 20 games to collect, making it relatively easy to amass. If you want an even easier collection to seek out then we'd recommend The Bitmap Brothers, as all its games are relatively high quality and not too costly.

success on Commodore's computer before becoming international hits in their own right. It's this rich variety of titles – many of which are superior to the versions made for the Atari ST and PC – which makes the Amiga an appealing target for modern-day collectors. Like the Spectrum before it, the Amiga created an entire generation of bedroom coders, and as a result a sizeable "demoscene" grew up around the system.

Unfortunately, with such coding brilliance came a plague of piracy. The process of cracking games so they could be distributed on blank floppy disks was commonplace, and there wasn't a playground in the UK that didn't witness the sight of schoolkids exchanging disks with the very latest titles on. The volume of pirated software predictably impacted on genuine software sales, something which contributed to the Amiga's downfall in the early Nineties as developers and publishers migrated to platforms that were less susceptible to the problem.

By the time 1992 rolled around, the Amiga 600 and 1200 hit the market, but neither could replicate the success of the 500 and the Amiga brand started to lose ground to dedicated games consoles. The dismal performance of the Amiga CD32 made matters worse (making it collectible in its own right) and in 1994 Commodore filed for bankruptcy.

Throughout its lifespan the entire Amiga family saw approximately 12,000 different games, making the process of amassing a "complete" collection a daunting and almost impossible task. Even so, the average price of a boxed Amiga 500 game is comparatively much less than most of its direct contemporaries; you can pick up many titles for a few quid on eBay. There are notable exceptions, however; the infamous *Great Giana Sisters* was voluntarily withdrawn from sale by its publisher following consultation with Nintendo, who pointed out that it was a shameless clone of its *Super Mario Bros.* title. Mindscape's *Moonstone* is another rare release, its desirability driven by the fact that it was placed on the Bundesprüfstelle für jugendgefährdende Medien (Federal Department for Media Harmful to Young Persons) in Germany due to its intense depictions of blood and gore. The game has been known to fetch high prices in complete form.

Just a little further down the scale of rarity you'll find the big-box versions of many classic Psygnosis titles with their extra components, including all three *Shadow Of The Beast* entries. Cinemaware's Amiga lineage is also collectable, thanks to its lush cover art and the highly-regarded nature of the games themselves – *It Came From The Desert* and *Defender Of The Crown* are cult classics, even by today's standards. Elsewhere, limited-run curiosities such as the anime-themed puzzler *Gem'X* and the complete version of *Beneath A Steel Sky* fetch high prices.

The task of collecting all of the Amiga 500's best games is not one to be taken lightly, but you can pick up a working system and a selection of key titles for a modest amount of cash. You'll need to consider the volatile nature of floppy discs, but if you're serious about amassing a collection of classic games across a variety of genres, the Amiga 500 is a perfect choice.

THE PERIPHERALS

Quickjoy Jet Fighter

■ Ever wanted to feel like you're in the Tom Cruise flick *Top Gun*? Then this is the controller for you. As the name suggests, the Jet Fighter mimics the stick from a multi-million dollar combat aircraft.

Konix Speedking

■ One of the more usual sticks to see the light of day during the 16-bit era, the Speedking rests in the palm of your hand with the buttons on the underside. Despite its odd appearance it has plenty of fans, even today.

Hori Fighting Stick

■ You might assume that Hori's fighting-grade sticks are a recent invention, but the Japanese company was producing controllers way back in the 16-bit era, too. A solid controller for your Amiga action adventures.

Cheetah Annihilator

■ The *Annihilator* is a common sight even today, thanks to the fact that it sold plenty of units back in the day. While it's not quite as refined as some of its rivals, it provides accurate control and can withstand plenty of punishment.

Terminator head

■ Proof that some companies will stop at nothing once they've secured an expensive movie licence, this stick might look impressive, but it's incredibly uncomfortable to use. A collector's item, we're afraid, and little more.

Essential Joysticks

The Amiga may have become famous thanks to its dazzling selection of games, but it's important to remember that it was sold first and foremost as a computer, aimed at business types rather than hardcore gamers. As a result, early models didn't come with any kind of gaming controller – which meant that a whole host of third-party sticks appeared, each trying to offer something different to the rest.

In fact, it could be said that some of the sticks available for the Amiga possibly went a little too far in their efforts to stand out, using popular figures from comics and movies to give them that little something extra. Characters such as Batman and the Terminator were both called upon when it came to crafting a unique stick, although once the novelty of waggling the Dark Knight around had worn off, you were usually left with a very uncomfortable hunk of hardware.

It goes without saying that a decent controller is an essential item in the armoury of any self-respecting Amiga fan, and picking the right one is often a matter of personal preference than anything else. Manufacturers such as Cheetah, Konix, Powerplay, Sigma and Quickshot all produced sticks aimed at home computer gamers, but the Super Pro Zip Stick and Kempston Competition Pro are regarded by many fans as the best of the best.

Both are highly responsive, boast large buttons and showcase comfortable designs, making them a must for any serious collector. The Competition Pro is such an esteemed controller that it has recently gone back into production despite the fact that original creator Kempston no longer exists – Individual Computers and Speedlink handled the manufacturing process this time around.

Because the Amiga uses the same 9-pin interface as the Atari 2600, Sega Master System and Sega Mega Drive, it's also possible to use controllers intended for those formats – although you need to remember that only one fire button is supported, so you won't be able to use the additional keys on the Mega Drive pad.

...AND THE REST

01. External CD Drive

■ Thanks to the legacy of the CDTV, the Amiga range was one of the first platforms to embrace the power of the CD-ROM storage medium – sadly, it was a little too early to the party. Even so, an external CD drive is a handy item for any serious Amiga collector – just check that the system you have is compatible before placing down your cash.

02. External Floppy Drive

■ With some Amiga games coming on multiple discs, an additional external floppy drive helps cut down the amount of swapping you have to do. When you've got two-disc games this is a life-saver, but when you've got games which come on several floppies, it prevents the onset of repetitive strain injury.

03. GVP A530 Turbo

■ Released in 1992, this module bolts onto the side of the Amiga 500 and grants it additional processing grunt and memory. Modern "Accelerator Cards" are also available, which benefit from more recent developments – and they're also cheaper – but if you're going for authenticity, seek something like this out.

04. Action Replay

■ It wasn't just home consoles which got a version of Datel's cheeky cheat cartridge – the Amiga had a slice of the action, too. This fiendish little device allows you to crack your games wide open, drastically reducing the challenge in the process.

05. A590 Hard Drive Controller

■ Back in the day, this unit would allow you to hook up a hard drive of around 80MB in size, but modern Kickstarter ROMs have pushed this figure higher. Getting one of these to work is quite a task, but it's another cool piece of collectable hardware.

06. 1084s Monitor

■ Playing games on your massive 42" LCD TV is one thing, but for the truly authentic experience you need to get yourself a decent monitor. Released by Commodore alongside the Amiga, these units were designed to bring out the best in the system. Games look colourful, vibrant and incredibly detailed.

07. Amiga A500 Trapdoor Expansion Memory

■ 512K is all the memory the Amiga 500 shipped with, but using the A501 you could up to this an impressive 1MB – offering better multitasking support and enhanced performance all-round.

AMIGA 500 The Collector's Guide

TOP GAMES TO PLAY

Eye of the Beholder II

■ Westwood's second stab at the D&D world is an improvement over its predecessor – and that's saying something, as the original took the *Dungeon Master* template and expanded it massively. The third game – not handled by Westwood – remains something of a disappointment.

Sensible World of Soccer

■ Considered by many to be the best football game ever, *Sensible World Of Soccer* was a revelation at the time of release, allowing you to experience almost every facet of the professional footy world – right down to managing your team and organising transfers. 1,500 teams and 27,000 players.

Speedball 2

■ The Bitmap Brothers really hit the ball out of the park with this futuristic and ultra-violent sport. Gorgeous to look at and absolutely addictive in two-player mode, *Speedball 2* is arguably one of the Amiga's defining releases.

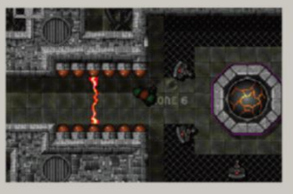
Cannon Fodder

■ The use of the poppy image caused quite a stir when *Cannon Fodder* was released, but the cartoon-like violence is laughably tame when compared to modern titles like *Call Of Duty* and *Medal Of Honor*. Despite the controversy, this remains a fantastically playable game, with brilliant controls.

The Chaos Engine

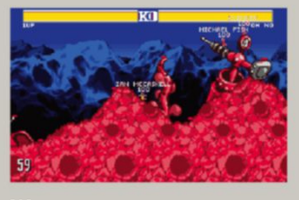
■ Another Bitmap Brothers classic, *The Chaos Engine* is a steampunk shooter which showcases why its developer was considered the master of 16-bit pixel art back in the early Nineties. A sequel in 1996 was even better, but the original is more famous.

PLAY THESE NEXT



Alien Breed

■ Team17's most famous release (outside of *Worms*, naturally) is this atmospheric top-down blaster, which owes a massive debt to Ridley Scott's Hollywood horror *Alien*. Tense action, a stern challenge and awesome 2D visuals ensure this stands the test of time – as the recent release on the iPhone proves beyond all doubt.



Worms

■ The fact that the *Worms* series is still going strong even to this day should tell you all you need to know about the quality of this game. Insanely addictive in both single and multiplayer, the turn-based combat is peppered with humour, lending the game a universal charm. Despite the sequels, the first game remains the most pure edition.

Super Cars 2

■ Top-down racing brilliance from Magnetic Fields and Gremlin Graphics, with a good measure of frantic combat thrown for good measure. The ability to upgrade your vehicle adds depth, and the two-player mode is capable of making (or breaking) friendships. Topped off with amazing visuals, this is another Amiga classic.

Hunter

■ Predating the likes of *Far Cry 3* by more than two decades, *Hunter* is an 3D open-world adventure which sees you navigating a collection of islands via a wide range of different vehicles – including cars, hovercraft and even surfboards. Tremendously influential, *Hunter* is remarkable for the degree of freedom it affords the player.

Pinball Fantasies

■ The sequel to the equally brilliant *Pinball Dreams*, *Pinball Fantasies* is still regarded by many fans as the best representation of pinball on any digital platform. The bold graphics remain impressive, and the ball physics and table designs are spot-on. The sequel – *Pinball Illusions* – is also worth checking out.

Xenon 2: Megablast

■ Drastically different from its prequel, *Xenon 2* cemented The Bitmap Brothers' reputation as developers of note – although it should be mentioned that they only designed the game, with the actual coding being done by The Assembly Line. A sampled soundtrack only served to make the game seem even cooler.

Gods

■ Another gem from The Bitmap Brothers showcasing some of the best visuals you'll see on any 16-bit platform. This puzzle-filled action platformer illustrates the Brothers' masterful skill with the Amiga hardware; it would be converted to other formats, but the Amiga version is the definitive article.

Hired Guns

■ This *Dungeon Master*-style RPG grants control of four different characters, with the twist being that they move independently and have their own windowed screen. One of DMA Design's most accomplished releases, and a nice deviation on the genre.

Lemmings

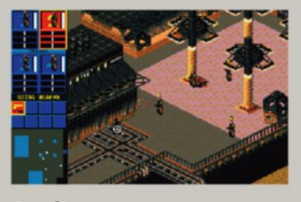
■ One of the most famous video game brands of the early Nineties, *Lemmings* was ported to practically every platform that existed at the time, but is best known for its outing on the Amiga and Atari ST. It illustrates perfectly how a mouse-driven interface can enrich a game like this.

Shadow Of The Beast 2

■ *The Shadow Of The Beast* series is famous for favouring style over substance, but there's still something undeniably intriguing about the trilogy. Roger Dean's fantastic cover artwork pulls you in, and the high-quality visuals maintain your interest – even when the rock-hard difficulty level is making your question your skills.

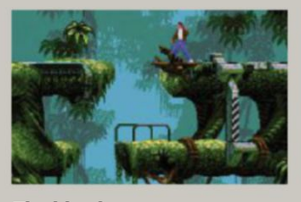
Stunt Car Racer

■ Geoff Crammond's seminal 3D racer is like being on a rollercoaster, with the added danger of falling of the edge. It says a lot about the standard of this game that nothing else has ever really come close to matching it, even after all these years. Boasting fantastic physics and beautifully designed tracks, it's an essential part of any collection.



Syndicate

■ Coming quite late in the life of the Amiga, Bullfrog's iconic real-time strategy title was recently rebooted as an FPS, with mixed results. The original game is a grim vision of the future where corporations rule the world, placing you in the shoes of one such firm with the aim of achieving world domination.



Flashback

■ The spiritual sequel to *Another World*, this 2D platformer features silky-smooth animation, taxing puzzles, epic action and some of the best cut-scenes on a non-CD release. It's being remade for modern consoles as we speak, but it will need to be pretty special to match the impact of the original release.

UFO: Enemy Unknown

■ Julian Gollop's best-selling turn-based strategy title builds on the work done in his previous games, such as *Rebelstar Raiders* and the excellent *Laser Squad*. Recently remade for PC, 360 and PS3, this isometric title is regarded by some as one of the greatest games of all time – and rightly so.

Lotus Turbo Challenge 2

■ Before *Gran Turismo* and *Forza*, this was the best option for petrolheads wanting to experience the thrill of racing thousands of pounds of performance sports car really, really, fast. Smart visuals combine with a superb sense of speed and four-player split screen to deliver a solid racer.

TOP RAREST PAL GAMES

Moonstone
■ This medieval hack-and-slash action title gained notoriety upon release for being banned in Germany due to its blood and gore, yet it received fair-to-middling review scores. Even so, the game's reputation as a video game nasty has kept its value high – copies go for well over £100 on eBay.

Gem'X
■ This anime-themed puzzler is another Amiga title which isn't all that great when it comes to pure gameplay, but is extremely hard to track down in the wild. Although scantily-clad anime girls were a key factor in the game's appeal to a certain market, it's all a little tame.

Last Battle
■ Based on the Mega Drive version – which in turn is a westernised version of the Japanese game *Fist Of The North Star* – this curious conversion by Elite isn't particularly memorable, aside from the fact that it's rarer than rocking horse droppings.

Jim Power In Mutant Planet
■ With its distinctive visuals, curious mixture of gameplay styles and pumping soundtrack courtesy of Chris "*Turrican*" Hülsbeck, *Jim Power* manages to overcome the obvious shortcomings of its terrible cover art and become a worthwhile action title.

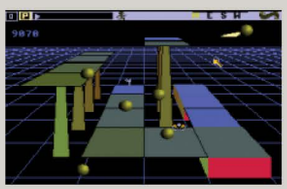
Traps 'n' Treasures
■ A colourful clone of Sega's *Wonderboy In Monsterland* series (developer Roman Werner lists Capcom's *Son Son II* as one of his all-time favourite games), *Traps 'n' Treasures* boasts some lovely hand-drawn 2D visuals and compelling action.

GET THESE NEXT

OutRun (Sega version)
■ The Sega-published US version of Yu Suzuki's popular arcade racer is much harder to track down than the UK US Gold-published edition, but it's the same game on the actual disk. We actually prefer the UK box art if we're honest, but serious collectors will no doubt want to add this to their "must buy" list.

Amiga Karate
■ Its triangular box might not sit well on your shelf, but it certainly makes this martial arts title stand out from the other games in your collection. Looking a lot like *Archer Maclean's International Karate+*, this isn't quite as accomplished, but it remains an extremely enjoyable fighter in two-player mode.

Eye
■ Based on a somewhat nonsensical board game from the Eighties, the US version of this title is becoming extremely collectable. Unsurprisingly, the board game – very much like this Amiga port – has since slipped into the mists of time, but dedicated Amiga fans will want to seek this out, especially if you're after something a little different.

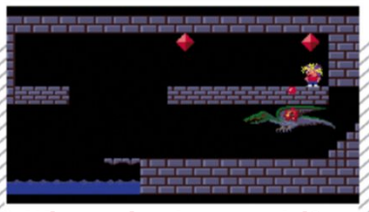


Mind Walker
■ One of the earliest Amiga games, *Mind Walker* was released in 1986 – yet it remarkably remains compatible with almost all Amiga hardware variants. The unique visuals and out-there storyline make this an interesting release, and one well worth picking up – especially if you're serious about your Amiga history.

Vaxine
■ Like *Amiga Karate*, this is mainly popular with collectors due to its extremely interesting packaging – it was distributed in a round metal tin rather than the standard cardboard box. A trippy first-person shooter where the player attempts to repel a deadly virus, it's actually very playable, too, so be sure to seek it out.

THE JEWEL IN THE CROWN

If you're looking for a rare PAL Amiga game that feels genuinely unique, this is the item you should seek out for your collection



What makes it so special?

■ The story behind *The Great Giana Sisters* is the stuff of legend, but the involvement of Manfred Trenz and Chris Hülsbeck – who both worked on *Turrican* – also helps add a certain degree of desirability to the game.

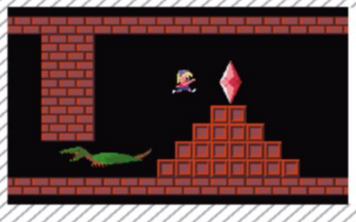
Giana Sisters
We want you to have a lot more fun, therefore we have implemented the following changes and enlargements in the ATARI ST and AMIGA versions of GIANA SISTERS:
1. You can collect and keep several MAGIC-bombs and CLOCKS (instructions) in order to use them when they are needed.
2. Pushing the joystick down diagonaly to the
The Great GIANA SISTERS

Why should you play it?

■ Even if you ignore its back story, the game is fantastic fun. It's not quite up to the majesty of Nintendo's original platformer, but its quality is immediately obvious. Many platformers, particularly on the Amiga, failed to capture the magic of their console counterparts, but this wasn't the case with *The Great Giana Sisters*.

What makes it hard to find?

■ What makes it so hard to find? The game is heavily influenced by Nintendo's *Super Mario Bros*, and was pulled from store shelves following legal pressure from Nintendo. As a result, not many copies made it into circulation. The are two variants of the Amiga version, the one shown here and a traditional big box.

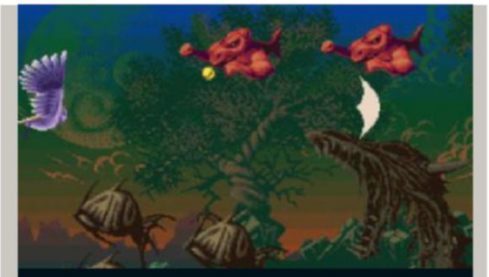


Why is it so expensive?

■ The game's fame and status as a *Mario* clone helps keep the price high. Because there are so few copies around, demand is always strong and when the game is up for sale on eBay, it always fetches an insane amount of money.

AMIGA 500 The Collector's Guide

THE PAL AMIGA GAMES YOU NEED TO OWN



Agony

- A Mind Forever Voyaging
- A Prehistoric Tale
- Adventure Quest
- After Burner
- Alien Storm
- After The War
- Agony
- Akira
- Alien Breed
- Alien Drug Lords: The Chyropian Connection
- Apidya
- Arctic Fox
- Arkanoid
- Army Moves
- Artificial Dreams
- Aztec Warrior
- Batman: The Caped Crusader
- B.C. Kid
- Baron Baldric: A Grave Adventure
- Battle Chess
- Battle Squadron
- Battle Valley
- Beyond Zork
- Bionic Commando
- Bismarck
- Black Viper
- Blasteris
- Blazing Thunder
- Bloodnet
- BMX Simulator
- Body Blows
- Bombuzal
- Boomeraid
- Borrowed Time
- Brainbusters
- Brainstorm
- Brataccas
- Brian The Lion
- Brutal: Paws Of Fury
- Buck Rogers: Countdown To Doomsday
- Buggy Boy
- Cannon Fodder
- Captain Blood
- Carrier Command
- Castle Warrior
- Checkmate
- Chinese Chess
- Chip's Challenge
- Classic Invaders
- Cobra
- Coloris
- Commando
- Conan The Cimmerian
- Cool Croc Twins
- Corporate Raiders
- Cosmo Range
- Crystal Quest
- Cubit
- Cyber Cop
- D/Generation
- Darkseed
- Deep Space
- Defender Of The Crown
- Demon Blue
- Denaris
- Diggers
- Digital Dungeon
- DNA Warrior
- Dogs of War
- Dragon Lord
- Dream Zone
- Elf
- Elite
- Elvira: The Arcade Game
- Entity
- Escape From Colditz
- ESWAT: Cyber Police
- European Championship 1992
- Explora: Time Run
- Exxon
- Eye of the Beholder
- F-16 Combat Pilot
- Fields Of Glory
- Final Countdown
- Fire and Brimstone
- First Class With The Shoe People
- Flood
- Formula 1 3D
- Future Sport
- Garfield: Winter's Tale
- Gee Bee Air Rally
- Gem'X
- Genius
- Ghost Chaser
- Ghosts 'n Goblins
- Gladiators
- Goal! Championship Cup Edition
- Golden Axe
- Grand Slam: World Class Tennis
- Gravity Force
- Great Giana Sisters
- Gulp!
- Hacker
- Hard 'n' Heavy
- Hardball!
- Harrier Combat Simulator
- Hellfire Attack
- Heroquest
- Hot Rod
- Hotel Manager

James Pond: Underwater Agent

- Hybris
- Ian Botham's Cricket
- Impossible Mission
- Iron Tracker
- James Pond: Underwater Agent
- Jewels of Darkness
- Jim Power
- Joe & Mac: Caveman Ninja
- Journey To The Centre Of The Earth
- Jungle Boy
- Katakis
- Kick Off 2
- Kwik Snax
- Lancelot
- Last Battle
- LED Storm
- Lemmings
- Lethal Xcess: Wings Of Death 2
- Libyans In Space
- Limes & Napoleon
- Loom
- Lords of War
- Mace
- Mega Twins
- Mewilo
- Microprose Soccer
- Midwinter
- Millennium 2.2
- Mitre Soccer Superstars
- Moonstone
- Mr. DO! Run Run
- Mr. HELI
- Murders In Space
- Narco Police
- Nathan Never: The Arcade Game
- Nigel Mansell's Grand Prix
- Night Dawn
- Ninja Mission
- No Exit
- Nobunaga's Ambition
- Operation Wolf
- OutRun (Sega version)
- Pacboy
- Panzer Kick Boxing
- Paperboy
- Phantom Fighter
- Pinball Prelude
- Pipe Dream
- Populous

EXTREMELY RARE Games that have less than a few dozen known copies available.

VERY RARE Very hard to come by. Expect to see only a couple of copies per year.

RARE You should be able to source these in a reasonable amount of time.

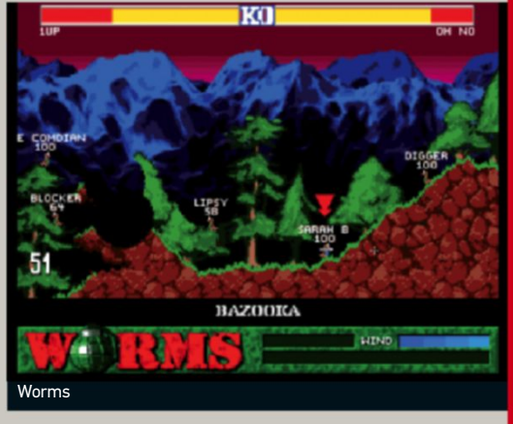
UNCOMMON You won't find them straight away, but you will after a search.

COMMON Always just a click away for the average collector.

VERY COMMON So common you'll find them in most bundles of games you buy.

Superfrog

- Ports of Call
- Power Drift
- Psyborg
- Puffy's Saga
- R-Typer
- Rainbow Island
- Rambo III
- Recovery
- Renegade
- Return to Atlantis
- Revenge Of The Mutant Camels II
- Rick Dangerous
- Rise Of The Robots
- Roadwar 2000
- Romance Of The Three Kingdoms
- Rules Of Engagement
- S.T.U.N. Runner
- Sanctuary
- Satan
- Savage
- Scramble Spirits
- Seven Cities Of Gold
- Silkworm
- Side Arms: Hyper Dyne
- Sim City
- Ski or Die
- Sky Fighter
- Skyfox
- Slackskin & Flint
- Sly Spy: Secret Agent
- Snoopy and Peanuts
- Soccer Mania
- Soccer Superstars
- Space Harrier (US Gold)
- Space Crusade
- Space Ranger
- Space School Simulator: The Academy
- Speed Buggy
- Spinworld
- Spot
- Spuk
- Spy vs. Spy
- Stormball
- Star Wars: Return Of The Jedi
- Street Gang
- Strider
- Strike Force Harrier
- Strip Fighter
- Strip Pot
- Suicide Mission
- Summer Challenge
- Super C
- Super Loopz
- Super Wonder Boy
- Superfrog
- Table Tennis Simulation
- Team Yankee
- Teenage Mutant Hero Turtles: The Coin-Op
- Terry's Big Adventure
- The Chaos Engine 2
- The Chessmaster 2000
- The Deep
- The Flintstones
- The King Of Chicago
- The Last Inca
- The Lurking Horror
- The Magic Garden
- The Man From The Council
- The Simpsons: Bart Vs The Space Mutants
- Theme Park
- Thexder
- Time And Magik: The Trilogy
- Tom & Jerry 2
- Top Of The League
- Traps 'n' Treasures
- Tron 5000
- Turbo OutRun
- Twin World
- Twintris
- UFO: Enemy Unknown
- Ultima VI: The False Prophet
- Victory Road: The Pathway to Fear
- Video Vegas
- Viz: The Computer Game
- Vortex
- War In Middle Earth
- War Machine
- Wargame Construction Set
- Weird Dreams
- Wing Commander
- Worms
- X-COM: UFO Defense
- Xenon
- Zool



Worms

Collector Q&A

We speak to Graham Humphrey about his impressive collection

So Graham, can you tell us what attracted you to start collecting for the Amiga?

I've always owned an Amiga of one description or another since I was very young so I'm not sure I ever consciously chose to get involved with it. It's just always been there. I've owned all manner of machines since first getting one but there has never been a time when the Amiga wasn't set up and being used too.

You have a lot of different Amiga systems. What would you say is your most treasured piece in your collection and why?

Without a doubt it has to be my A1200. It's permanently set up and has been for many years now. I must have bought it a decade or so ago for about £40 and it's fair to say I've had good value for money out of it. It is also a very expandable machine so adding an accelerator, hard drive and CD-ROM drive has prolonged its life immeasurably. Away from the hardware I also have quite a large collection of magazines, including many copies of *Amiga Power* and *Amiga Format*, which are still an invaluable reference and an entertaining read even now.

What's the most cash you've spent on any single piece of Amiga hardware or software? Any expensive horror stories?

I've been quite lucky really as most of the stuff I own I've managed to get for a decent price. For instance, I bought my accelerator (which contains a 68040 processor, substantially quicker and more powerful than the A1200's standard 68020, and 32MB RAM) for around £75 seven years ago and it's still going strong today. You often have to go into three figures to get a card that's inferior to that one. I even managed to get my CD-ROM drive plus the Squirrel SCSI interface (which plugs into the PCMCIA port) for £50 or thereabouts. I don't think I've ever spent more on one item than these two.

You've been amassing your collection for quite a while now. Is there any item you'd still like to own but haven't been able to get?

I must admit there are a few things I'd like but space and time is an issue more than money – I much prefer buying things that I'll actually use rather than to just store away so if I've got nowhere to put it or I'm occupied by other things it's not really worth it. Which is a shame as I'd quite like to get a towered and vastly beefed-up A1200 or A4000, just for the sheer hell of it more than anything. I think it would be really fun to use and to have all the expansions and drives tucked away in its case is much more tidy and attractive than my current arrangement, with wires pretty much covering my desk.

Before you go Graham, what final advice would you give to any potential collectors of the Amiga? What should our readers be looking out for?

The Amiga has an impressively diverse range of hardware and software and you've got no hope of owning it all so before splashing out, think about what you want an Amiga for. If you want to relive the days of playing games from floppy, buy an A500 and get yourself a decent stack of boxed games; most of them are reasonably common and go fairly cheap (and besides, nice big box Amiga games look great on a shelf). If you like to mess around with hardware and are curious about how it all works and how far you can push it, get a later, more expandable model and be prepared to spend a lot of cash on add-ons. This will also enable you to use the late-era CD-ROM based games and applications.

*** Special thanks to Carlo Pirri and Michael Mayerhofer for their photography assistance and the always helpful Hall of Light**

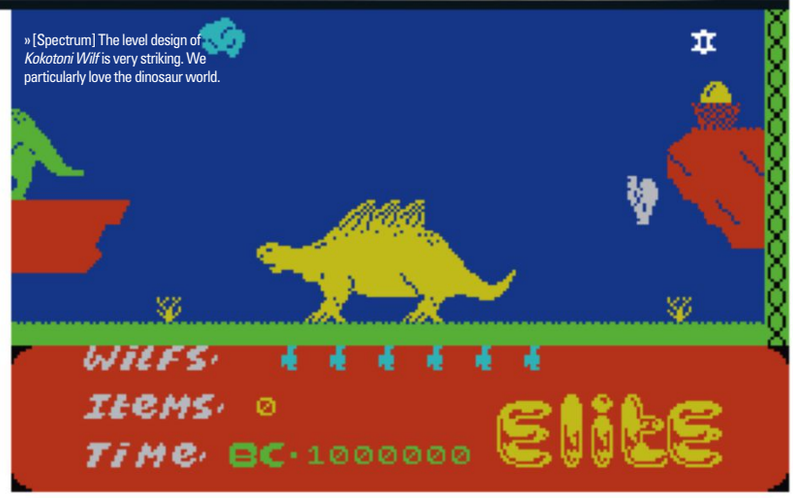
CLASSIC GAMING FOR UNDER A FIVER

CHEAP AS CHIPS

If there's one thing we've learnt about retro gaming, it's that your money can stretch an amazingly long way if you really want it to. Granted, a mint copy of *Radiant Silvergun* is going to cost you a small fortune to procure, but there are plenty of other worthy titles that can be picked up for less than five English pounds…

KOKOTONI WILF

» [Spectrum] The level design of *Kokotoni Wilf* is very striking. We particularly love the dinosaur world.



INFO

- **SYSTEM:** SPECTRUM
- **ALSO AVAILABLE ON:** COMMODORE 64, AMSTRAD CPC
- **RELEASED:** 1984
- **PUBLISHER:** ELITE SYSTEMS
- **DEVELOPER:** IN-HOUSE

Why don't videogames have awesome names like *Kokotoni Wilf* anymore? In fact, while we're thinking about it, how do you even come up with a name like *Kokotoni Wilf* in the first place?

Luckily, as we know Elite's Steve Wilcox we were able to ask him about the origin of that strange name. "Wilf was chosen [to] create an association with *[Miner] Willy*," he told us. "Kokotoni came from an abridgement of Mkokotoni, an interesting-sounding word which I'd picked up from a book that I was reading at the time. I recall it having an African connection and (having just Googled it) have re-discovered that Mkokotoni is a city located on the Tanzanian island of Unguja (Zanzibar)."

Now that answer has been solved, let's move on to why we're revisiting Elite's very first game. The short answer is, after 29 long years it's still a great little platformer, which still manages to give Matthew Smith's *Jet Set Willy* a good run for its money.

The *Jet Set Willy* mention is rather relevant as Elite was keen to point out that its new game was every bit as worthy as Software Projects' offerings. "*Kokotoni Wilf* was designed and developed in-house by Elite's Andy Williams and Rory Green," continued Steve. "The concept and the design were inspired by commercially successful 'platform' games of the time including, obviously, *Manic Miner* and *Jet Set Willy*, which we were trying to mimic."

To be fair it was an impressive mimicry, with Elite capturing much of the surreal humour of Smith's games, but also adding its own spin to the tried and tested formula, particularly with the game being set across six distinct time zones. And then of course there was Wilf himself. The assistant of Ulrich the Wizard, Wilf is blessed with a pair of large angel wings that allows him to fly through the game's six levels.

This in itself was a huge deal as it did away completely with the precise (and some might say unfair) pixel-perfect jumping that was found in Smith's game. There's a freedom to *Kokotoni Wilf* that was refreshingly rare at the time, and it still manages to impress when you revisit it today. That's not to say Elite's game didn't have its problems, though.

Wilf's huge wings meant that collision detection could occasionally be an issue, making judging gaps far harder than it needed to be. Invisible walls were also an issue, as it wasn't always clear where you could and couldn't exit a screen.

Kokotoni Wilf might not have been the *Jet Set Willy* beater Elite was hoping for, but it remains an excellent debut that still holds up today. 29 years on and we're still hooked on it.

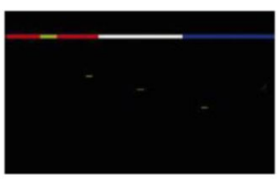
THE NAME GAME Games with stupid names

Bionic Granny

In addition to having a terribly rubbish name, this offering from Mastertronic is easily one of the worst C64 games we've ever played. Naff graphics, ropey collision detection and poor gameplay make it one to avoid.

Wrath Of The Killer Pigs

This Spectrum game from Richard Huddy sounds a lot more impressive than it really is. *Wrath Of The Killer Pigs* is a pretty poor *Galaga* clone with you fending attacks from incoming intergalactic swine.



Tongue Of The Fat Man

Known in the West as *Mondu's Fight Palace* this was a poor one-on-one fighter that offered crap special moves, rubbish characters and terrible collision detection. The original PC version does have a nice cartoon style though.

Princess Tomato In Salad Kingdom

Fans of truly bad Engrish will love this entertaining NES adventure, as it's rife with howling mistakes. Stick with it though, it is a surprisingly good game.

Awesome Possum Kicks… Doctor Machino's Butt!

It may have an environmental message, but this is a truly abominable *Sonic* clone with a name that's as terrible as its ropey collision detection. Do not play this game!

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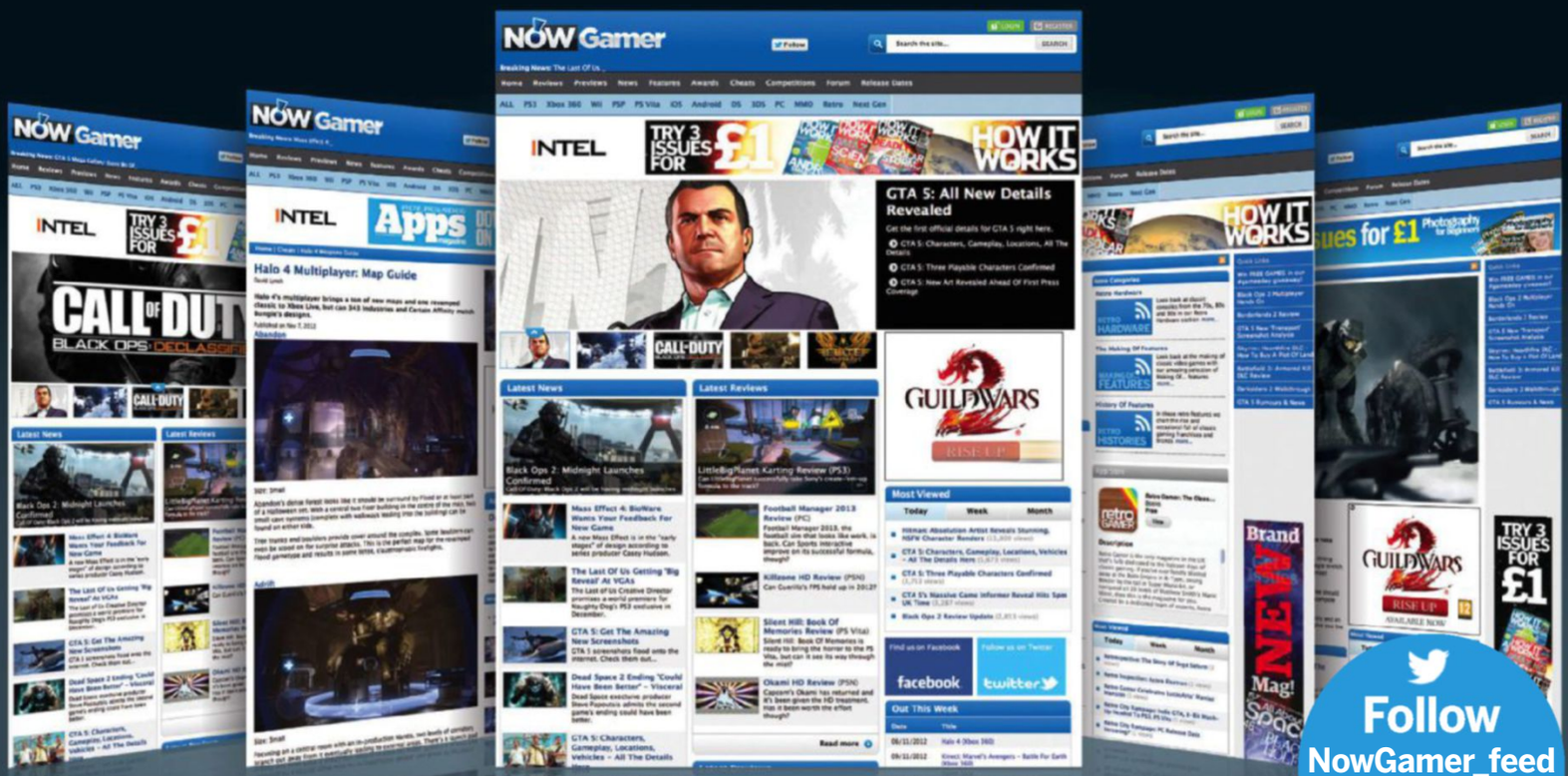

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THE MAKING OF

With its epic story, unique characters and dark themes, Black Isle Studios' epic adventure is rightly hailed as one of the greatest RPGs of all time. Craig Ritchie speaks to the project leads who brought us this landmark role-playing title

It was the mid-Nineties in Irvine, California, and the long-standing and successful Interplay Entertainment was just setting up its dedicated RPG division that would come to be known as Black Isle Studios. Among the talent hired to work on its original games was one Chris Avellone, a writer and freelance game designer. Chris recalls being asked in his initial interview how he would begin a game set in one of the licences Interplay had the rights to but was simply sitting dormant: the *Planescape* universe. "I told him I'd start with the player waking from the dead in the Mortuary," says Chris. "It was many years before that was put to paper, however."

Interplay's Feargus Urquhart and Brian Fargo had recognized the missed potential of the unused licences they had paid so much to acquire, and Planescape, being a truly unique world that had never yet been the setting of a videogame, was officially given the go ahead. They hired a young programmer Dan Spitzley, who had only recently finished an undergraduate Computer Science degree.

"When I started at Interplay," recalls Dan, "Black Isle didn't exist yet, but various *Dungeons & Dragons* licenced games were already in the works. I spent two years working on the computer version of TSR's *Dragon Dice* collectable dice game. Shortly before it shipped, Feargus Urquhart (head of the then-fledgling Black Isle division) walked into my office and asked if I wanted to be the lead programmer on *Torment*, which was entering pre-production. The answer was pretty much an immediate 'Yes'. I must admit that I was surprised that Feargus approached me with the offer. I was still quite junior at the time and *Dragon Dice* wasn't exactly shaping up to be a huge hit. Presumably, someone I'd been working with told him I wasn't too offensive-smelling, and that was good enough for him."

For those unfamiliar, the dark, bleak, and far off centre campaign setting of *Planescape* is based across a set of planes of existence in the larger *Dungeons & Dragons* universe, with an unusual look and feel, distinct locations, factions and an entire cosmology that is a far cry from the standard Tolkienesque high-fantasy fare.

"Like just about every game I've worked on in my career," says Chris, "the franchise or premise was mandated, and then I worked within the parameters given. To *Planescape*'s credit, the 'parameter' of the franchise is that there are no parameters. So in many respects, it was the most free-form franchise I've had the opportunity to work with."

Chris took to the task with a near obsessive dedication, diving into the source material and spending his days crafting the plot and characters of what would become *Planescape Torment*. Tim Donley, who was given the role of lead artist, recalls his early time on the project: "All I knew about Chris is that he never came out of his room," says Tim, "a tiny half metre by half metre space, full of books, and all he was ▶

THE MAKING OF

ROLL CALL

The key characters of Planescape: Torment

NAMELESS ONE

■ The game's protagonist, once human but now an immortal with no memory of who he is or how he ended up in the Mortuary. Able to play as a fighter, mage or thief thanks to training in game (and not character creation), the Nameless One has a wide-open potential path of discovering his mysterious past through his adventure in Sigil.

ANNAH

■ A young Tiefling woman whose language and demeanour do not hint at years spent in Swedish finishing school. This fighter-thief is an invaluable companion both for trap detection and a lethal backstab, and is a potential romantic interest for the Nameless One. She was inspired by Betty from the *Archie* comics, of all places.

MORTE

■ Your floating skull companion with a far longer history with the Nameless One than he originally lets on. Comic relief, guide, skeletal encyclopaedia, and a decent fighter (albeit limited to biting only), this ambiguously trustworthy character somehow manages to have a full inventory despite nowhere to put anything. As the game says, "Don't ask".

DAK'KON

■ A disciplined and dedicated Githzerai warrior carrying his trademark karach sword, the blade shaped from a substance that embodies chaos. A follower of Zerthimon, Dak'kon is both wizard and fighter, and proves a crucial ally for the Nameless One. He is integral to both the Nameless One's future, and his enigmatic past.

IGNUS

■ With one of the most interesting back stories in the game, this not entirely mentally sound mage has an unhealthy affinity for fire which led to him being confined in the Plane of Fire due to an unscrupulous attempt to burn down part of Sigil. He now gives the Smouldering Corpse bar its namesake, and can join the party if freed from his flaming prison.

» [PC] You're going to want to buff Wisdom and Intelligence for this game.

doing was writing, writing, writing. I didn't know Chris too well and I was always asking what he was working on. Everyone was hyped because no one was really doing anything with the *Planescape* universe, at least videogame-wise at the time."

Tim remembers reading what Chris had worked on and thinking that it was amazing. Chris presented a pitch, introducing Tim to Sigil (*Planescape*'s main city) and the idea of the *Planescape* universe, and he got into it immediately. "Chris had a very big passion for the game and the licence," recalls Tim. "He was a very open and easy to talk to guy, and really okay with suggestions to change his ideas – he was very chilled with this stuff. It benefited us to have this liquid working environment where you could suggest something and see it happen as long as you kept to the spirit of what they were trying to do. The team loved it and we all just had a lot of fun."

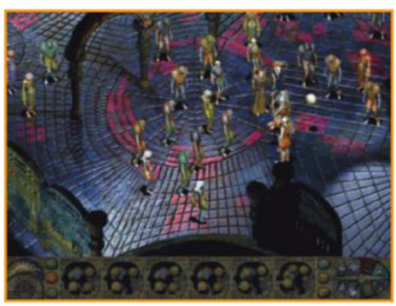
At the time, a developer called BioWare was working on a Forgotten Realms project that would eventually become the classic *Baldur's Gate*. Beneath the hood was the now renowned Infinity Engine, which BioWare shared with the fledgling group at Black Isle. Even the early toolset provided to the team was mature enough to bring Avellone's vision to life, and thanks to great communication and a good working relationship with BioWare, Dan and his team learned how the tools and code worked and were able to create background art, character animations and dialogue without having to wait for a final version of the iconic Infinity Engine.

"As time went on, BioWare would flesh out things like its combat timing system and its implementation of the *D&D 2nd Edition* rule set," says Dan, "and we'd integrate those into *Torment*. However, we did take some liberties with the *D&D* rule set. For instance, the Nameless One and his ability to level up across several disciplines wasn't standard for *D&D*, but it made sense in the context of the game. We had to write a lot of that code from scratch, so we could still make forward progress alongside BioWare's engine work."

"*Planescape: Torment* took time because we didn't understand the engine," adds Tim, "and the game itself requires you to get in there and discover what works. A lot of it was theory and we didn't know if it could happen – like Chris wanted the Lady Of Pain [Sigil's ruler] to fly over the city if you did bad things: "Do five bad things and the Lady Of Pain will appear and wallop you", but we were like 'How's that going to work?' We didn't know. We had this giant sprite of the Lady Of Pain at like 512x512 and it could hardly fit on the screen, but we were just like, who cares, do it! Tried things, some worked, some didn't, we fixed what didn't. Not a day went by where there wasn't some new thing we had to learn."

The team ended up doing a lot with the engine that BioWare had never anticipated, the *Planescape* setting requiring game aspects that players wouldn't expect in a standard Forgotten Realms adventure. "If you're familiar with it," explains Tim, "its whole point is that it's wacky. Everything's wacky! Nothing is what you expect. Like, you pick up a sword and it can talk to you, and now suddenly you've got to have a sword character, and BioWare didn't expect this and so the Infinity Engine is not really made for that. We modified it where we could and where we couldn't,

» [PC] Combat was more an also-ran than a star attraction.



» [PC] The turnout for the *Thriller* auditions was excellent.

we worked around it. The engine is amazing and the fact that they made it at the time is just unbelievable."

Part of this can be attributed to the fact that the Infinity Engine made use of LUA, a scripting system that allows designers and scripters to perform game tasks without having direct access to the code – especially handy when developing a game build on an engine that is itself still a work in progress. Dan recalls how the Infinity Engine provided a range of functions for LUA to do things like setting story variables, manipulating inventory and stats, creating AI behaviours, and laying out cutscenes.

"This let the scripters handle building a lot of necessary game logic safely (read, not as likely to crash the game) while freeing up the programmers to work on engine-level changes and new features," he says. "I wouldn't say that LUA itself made role-playing games awesome, but anything that allows content to be created without programmer intervention radically increases iteration time and productivity. For a large RPG, this is vital. That's why the Infinity Engine was so important to the success of *Black Isle*. BioWare created a workflow that was geared towards generating an enormous amount of complex content in a fashion that prevented programming from becoming a bottleneck. It had a lot of quirks, like any game engine, but it did was it set out to do very well."

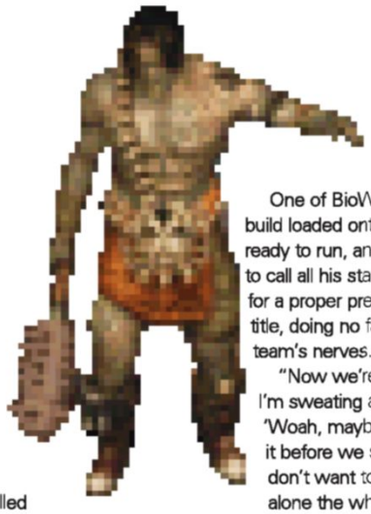
Once *Planescape: Torment* had been in development to the point that the Nameless One had been created and the team had built the Mortuary (which, incidentally, was going to be a standalone demo before becoming the first part of the game itself), Feargus informed the team that BioWare heads Ray Muzyka and Greg Zeschuk were keen to see the progress on the game. The core crew were sent off to BioWare's offices, hearts in hand and nervous about showing off their work.

"At the time they were working on *Baldur's Gate*," says Tim. "It was not released yet but we'd seen a copy of it and could tell it was going to be *huge*! Even then we knew it was giant and people were going to go crazy because it was straight, raw *D&D*. We were sort of like, 'Dang man, ours is good but where exactly is the audience going to be?'" More than a little nervous, the team arrived at the BioWare offices with the build ready to demo.

» [PC] Magical portals could be triggered by just about anything.

One of the main changes to *Planescape* that was most noticeable over *Baldur's Gate* was that the characters had been made a little larger than the latter's sprites.

"I think the *BG* guys were 96x96 pixels," says Tim, "and we did ours at 256 just so they'd look bigger. We also brought in the camera a bit: where *Baldur's Gate*'s was a little pulled back, ours was closer to the ground. BioWare at the time was 50 or a 100 people, and they have these insane art team guys, and we're working on their engine and sort of going in there showing them what we'd done with it. So we'd always been bitching and complaining about 'Stupid BioWare, they can't make an engine, blah, blah, blah', but we got up there and we're all totally humbled and see how they were just so organised. I mean, we thought we were organised but they just made us look like school kids – we didn't know what we were doing! (laughs) I was trying to write everything down as they were explaining how everything is done, like how they do their animations and so on. Add to this that everyone's a genius, and the worst part is they're all super nice and like totally the friendliest guys we've ever met!"



One of BioWare's artists got the build loaded onto his machine and ready to run, and Ray Muzyka decided to call all his staff in and dim the lights for a proper preview screening of the title, doing no favour for Tim and the team's nerves…

"Now we're all like 'Oh my god', I'm sweating and nervous and saying 'Woah, maybe you want to look at it before we show it to everyone, I don't want to show it *anyone* let alone the whole team!' Anyway, all these people come into the room and we're all huddled around this little monitor… the lights go down and everyone is staring up close to see what's going to happen, and the thing opens up. It fades in from black and the Nameless One starts by climbing off the table and it's a 500-frame animation of a 250-pixel sprite. Now, remember that that's probably more animation than what was used in an entire party in *Baldur's Gate* at the time, and Ray looks at his lead engineer and goes 'Is that our engine? Because that doesn't look like our engine! How come their sprites are so big? How come we don't have sprites so big?' and the engineer is going 'Well, I don't know, they've changed something!' At this point Dan said, 'Yeah, we went in and whatever your little editor said, we just changed the number to make them get

> WE THOUGHT WE WERE ORGANISED, BUT BIOWARE JUST MADE US LOOK LIKE SCHOOL KIDS!
>
> TIM DONLEY, LEAD ARTIST, ON VISITING BIOWARE

IN THE KNOW

- **PUBLISHER:** INTERPLAY ENTERTAINMENT
- **DEVELOPER:** BLACK ISLE STUDIOS
- **YEAR:** 1999
- **PLATFORM:** PC
- **GENRE:** RPG

» [PC] Concept work of Annah from the *Last Rites* (working title of *Torment*) vision statement.

» [PC] The entire first area of the game was originally going to be a standalone demo.

» [PC] Floating text was not supported by the engine before Black Isle got hold of it.

» [PC] *Project Eternity* is a Kickstarter project that will feature heavy involvement from Chris.

» [PC] www.gog.com is one of the few places still selling this fantastic RPG.

DEVELOPER HIGHLIGHTS

FALLOUT 2
(PICTURED)
SYSTEM: PC, MAC
YEAR: 1998

ICEWIND DALE
SYSTEM: PC, MAC
YEAR: 2000

BALDUR'S GATE: DARK ALLIANCE II (2004)
SYSTEM: PLAYSTATION 2, XBOX
YEAR: 2004

bigger and they got bigger.' And they were all going 'what? You can just change it like that? Aren't you using more memory?' And we were just like 'Yeah, but we don't care, whatever'! They just thought what we were doing was crazy, but they liked it, and we got such a positive response. When we left there we were on cloud nine because we'd really wanted them to like it."

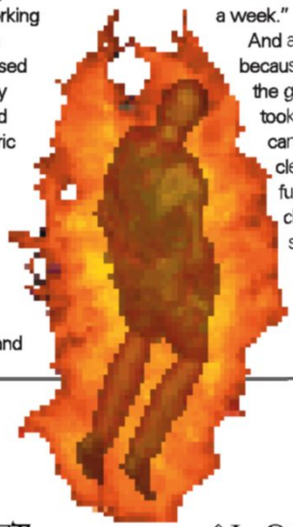
With great feedback from BioWare, the engine set up and being tweaked to their needs, an egalitarian development environment in place at Black Isle and a lead designer so open to suggestions and fresh concepts, new talent and ideas appeared in the form of individuals whose potential had not been realised until then. One new face, Dave Maldonado, started off as a tester on *Planescape* before impressing Chris so much with the bugs he was pointing out that he was brought on board to produce entire areas of the game.

"His bugs were great and showed that he had a good editorial sense and was able to critique pacing, flow, grammar, and logic," says Chris. "I asked if he'd be willing to write a zombie for me as an impromptu writing test. In short, he wrote a great zombie. So I asked if he could write more and be brought on, so then he took on more and more responsibility until he was a full-blown area designer. He was largely responsible for the Clerk's Ward and its many sub-areas."

> IN SHORT, HE WROTE A GREAT ZOMBIE. SO I ASKED IF HE COULD WRITE MORE
>
> CHRIS AVELLONE, WRITER, ON DAVE MALDONADO

The same was true in the graphics department, where Tim was working with a concept artist named Eric Camponella. Originally unimpressed by Eric's concepts, and especially how they transformed to finished models on the screen, Tim let Eric get hands on with the character modelling to see if he could produce a better finished product than what his concept allowed the modelling team to build.

"He'd never modelled a character before," recalls Tim, "and it was like somebody had just said 'Hey, why don't we let Michelangelo try to sculpture?' because I don't know how the guy's brain worked, but for some reason once he had translated it into a model, it looked *nothing* like that squiggly drawing he'd originally done! You've seen the game – *all* those characters are his. There's a hundred and something characters in the game and he modelled every one of them, producing as many as five a week."



And a good thing that he could, because when it came to populating the game, Chris and his team took full extent of what the campaign setting allowed and clearly were having a lot of fun coming up with offbeat characters and items. "I love short stories and characters that tell short stories," he says, "thus, a lot of the inventory items such as the Fanged Mirror of Yehcir-Eya

STRANGE NEW WORLDS

Other fantastic settings from the D&D universe

GREYHAWK

While Forgotten Realms holds top spot as the most well-known and adapted *D&D* licence, Greyhawk was in fact Gary Gygax's original high fantasy campaign. The setting is brought to life brilliantly in Troika's *The Temple of Elemental Evil*, widely regarded by fans as having the best implementation of 3.5 Edition D&D rules.

DARK SUN

Dark Sun is *D&D*'s bleak campaign set on the harsh and desolate world of Athas. SSI's loved-or-hated *Shattered Lands* saw players assume control of a band of gladiators set on freeing the city of Draj from a megalomaniacal sorcerer-king. The use of Psionics instead of standard magic added something new to the formula.

RAVENLOFT

The first of only three videogames set in the *Dracula*-inspired D&D campaign, *Strahd's Possession* saw an early blend of first-person 3D adventuring and real-time combat interspersed with beautiful hand-drawn cutscenes and portraits. An immersive soundtrack helped this unique if occasionally cumbersome game along.

AL-QADIM

Based on *The Arabian Nights,* with flavours of *Aladdin*, *Ali-Baba* and *Sinbad*, *The Genie's Curse* is the only computer game adaptation of the Al-Qadim campaign setting. Veering away from traditional RPGs and playing much more like an action-adventure, this was a really fun and all too often overlooked title.

and minor NPCs like Crier of Es-Annon have quite a few *Planescape* stories to tell. I tried to keep these stories interesting by keeping player hooks in them, and training players to recognise that even seemingly minor quest givers and items may likely to have an insight into something you've done in the past, which is a designer bribe to make people pay attention for selfish reasons."

The depth of the characters, the extent of the backstory and the intricacy of the plot resulted in a script totalling a massive 800,000 words. But this focus on storytelling and characterisation came at a cost: combat. While functional and definitely *Dungeons & Dragons*, the game's combat paled next to *Baldur's Gate* and *Icewind Dale*, the team's follow-up dungeon crawler.

"Combat took a back seat to character advancement, creation, quests, areas, and the narrative," admits Chris. "I regret this, and wish we had a systems designer assigned to the project. Focusing on a narrative is one thing, but if the moment-to-moment gameplay is lacking, then you've failed as a game designer. Sometimes a game can shine by one thing it does really well, and in *Torment*'s case, I think the narrative elements were that One Thing™. So if you enjoy narrative from a moment-to-moment experience, great, but the combat was pretty weak, and I did feel it could have used more dungeon crawling areas for players to explore and have fun in addition to having fun exploring the conversations in the game."

While maybe not all Chris had hoped for, his concerns over the combat had little effect on the success of the game, nor its lasting appeal. *Planescape: Torment* was released in December 1999, receiving great critical praise and immediately racking up awards. The game was an instant fan favourite, and although the sales numbers did not reflect it, *Torment* still has a huge following to this day. Widely regarded as having one of the best storytelling methods of any RPG, it truly is a fantasy role-playing literary achievement, with much deserved praise that continues well over a decade after its release.

"It's hard for me to believe sometimes," says Chris of the game's persisting popularity. "It was hard to think at the time that people would like this game so much, which is a sign that maybe you're not realising the potential of your game design correctly. It's definitely been the most popular game people have cited, and when they cite it, it's often clear they played the game extensively ('Where did you get the idea for the bronze sphere smelling of custard?'), which makes me happy, and I know it makes the *Torment* team as a whole very happy to see it referenced so much."

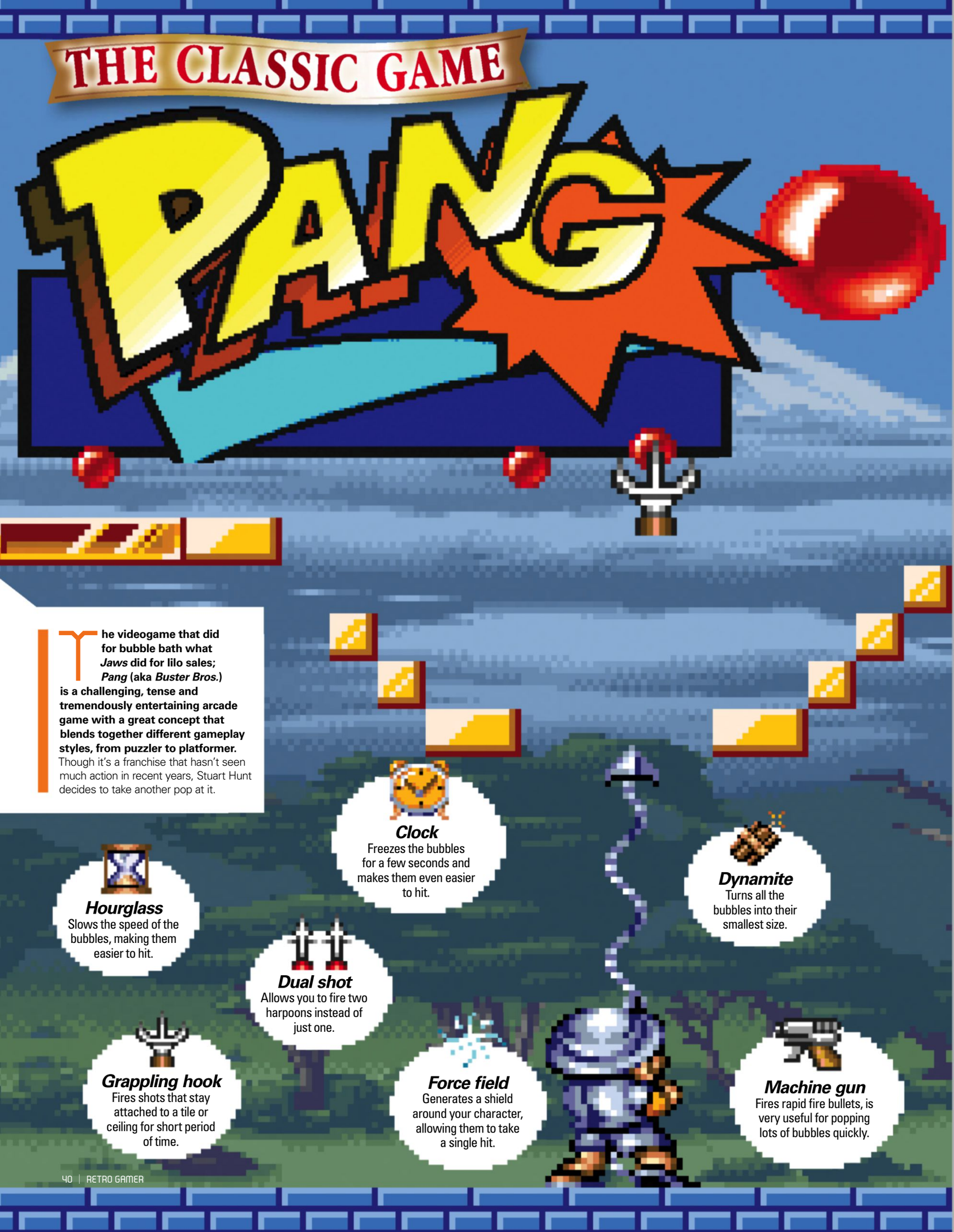
"I'm proud to have been involved in making *Torment*, and it's very heartening to know that people are still playing and enjoying it after all of these years," adds Dan. "If nothing I ever do in my career reaches those heights again, I can still be content saying I was part of something lasting and incredibly special."

PLANESCAPE: TORMENT
ICEWIND DALE
Where *Planescape* was story and dialogue driven, *Icewind Dale* – also powered by the Infinity Engine – was pure party-based dungeon-crawling fun set in the frozen north of the Forgotten Realms.
FALLOUT 2
Post-apocalyptic adventuring in one of the greatest RPG sequels of all time. Moody, atmospheric and funny, it's more of the same goodness that only improves upon the excellent original.
LIONHEART: LEGACY OF THE CRUSADER
Avellone helped out on this action RPG by writing some dialogue in Barcelona and providing samples of dialogue reactivity and how a conversation can react to a player's choice.
THE AVELLONE TOUCH
Other games Chris has been involved with
STAR WARS: KOTOR 2
This classic *Star Wars* RPG suffered terribly by being rushed out the door. Thankfully, a fan patch now allows for a gaming experience much closer to the designer's vision. A must-play game.
NEVERWINTER NIGHTS 2
To some, *NWN2* represents the pinnacle of *D&D* computer role-playing thanks to an excellent adaption of 3.5e rules, epic storytelling, and a vibrant modding community.
FALLOUT: NEW VEGAS
More post-nuclear fun in the same engine as *Fallout 3*, but with Obsidian rather than Bethesda at the helm, *New Vegas* is a vast, epic adventure and easily one of the best RPGs of the past decade.

THE CLASSIC GAME

Pang

The videogame that did for bubble bath what *Jaws* did for lilo sales; *Pang* (aka *Buster Bros.*) is a challenging, tense and tremendously entertaining arcade game with a great concept that blends together different gameplay styles, from puzzler to platformer. Though it's a franchise that hasn't seen much action in recent years, Stuart Hunt decides to take another pop at it.



Clock
Freezes the bubbles for a few seconds and makes them even easier to hit.

Hourglass
Slows the speed of the bubbles, making them easier to hit.

Dynamite
Turns all the bubbles into their smallest size.

Dual shot
Allows you to fire two harpoons instead of just one.

Grappling hook
Fires shots that stay attached to a tile or ceiling for short period of time.

Force field
Generates a shield around your character, allowing them to take a single hit.

Machine gun
Fires rapid fire bullets, is very useful for popping lots of bubbles quickly.

MEMORABLE MOMENTS

Pop Star

With elements of *Breakout*, *Space Invaders* and *Bubble Bobble*, *Pang* is a game that feels strangely familiar yet utterly original both at the same time. Like most classic arcade games, its gameplay is really simple to pick up. Plonked inside single-screen arenas, your only way out is to pop all the bubbles on-screen. However, popping a bubble would make it split off into two smaller bubbles, and shooting those would create two lots of smaller bubbles, a bit like a hydra. Quick thinking and dexterity therefore play a big part in beating the game, and playing with a friend tends to make the job a bit easier too.

The big smoke

There are some 50 stages in *Pang* and they take you all over the world. As the level design is pretty basic (usually it gets nothing more complex than a few ladders and tiles), the developers went to town on the backgrounds, drawing famous landmarks and places of interest to ensure the various stage settings at least looked a bit different. This isn't just for show though, as when you reach some of the colder places on the planet the levels are adorned with snow, and this makes the ground slippery and more difficult to aim your weapon and blast those pesky bubbles.

The Pop-pop

There's a nice selection of power-ups in *Pang*, but our favourite is the machine gun. Typically you're armed with a harpoon that fires and disappears when it comes in contact with a tile, wall or (hopefully) bubble. There are better versions of the harpoon (detailed in the box out opposite), but the ultimate pick-up is definitely the machine gun. Allowing you to blast away at the bubbles and fire off multiple shots, it makes life so much easier. Its only drawback is you have to be precise with your aim, as unlike the harpoon it doesn't leave a trail, which can used to trap bubbles and create makeshift barriers.

Amig-A+

Pang was one of those rare arcade games that enjoyed decent conversions across the board, with Ocean producing solid-to-stunning ports for home computers. The Best O' The Bunch Award has to go to the spiffy Amiga conversion, which was coded by Ocean France. A solid conversion that looks, sounds and plays the part, it's a stunning effort that feels virtually identical to its arcade counterpart – it just plays slightly slower and isn't quite as colourful. The ZX Spectrum version, by Arc Developments, was also great a port, scoring a not too shabby 94% in the pages of Your Sinclair.

The final bubble

The best moment in *Pang* is easily when you're down to a single small bubble and you still have acres of time on the clock. It's the single 'in-play' moment where you can actually take your foot off the gas as you aren't frantically trying to avoid bubbles coming at you from all directions. That moment when you fire your harpoon up the screen and watch gleefully as that single, small annoying bubble jumps towards its inescapable doom is a joyful moment indeed. For us, is the best moment in the game. Beating it with a mate is certainly up there too.

It's snow time

There are quite a few stages in *Pang* that will devour your money as it were winter bellbottoms during a May London Fashion Week (read: going out of fashion), and beating them is a case of clever strategy and expert timing – as the levels reset entirely when you snuff it, so bubble movement can be remembered (as long as you repeat your actions). The most challenging stage is probably Antarctica, as not only is it pretty open, but those platforms it does feature are at different heights, making bubble behaviour unpredictable. Even worse is the snow on the ground, which makes movement equally erratic.

IN THE KNOW

- **PLATFORM:** ARCADE
- **PUBLISHER:** CAPCOM
- **DEVELOPER:** MITCHELL CORP
- **RELEASED:** 1989
- **GENRE:** SHOOT-'EM-UP

What the press said… ages ago

MEAN MACHINES, 93%

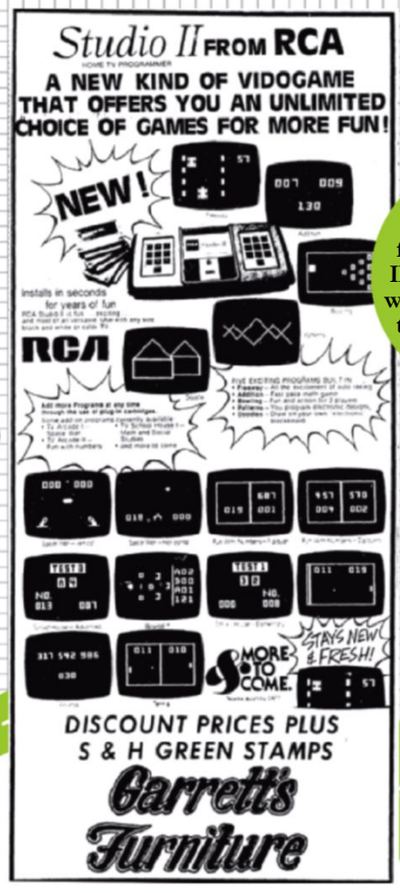
The GX4000 version is probably one of the best conversions you'll see on this machine for a long while.

What we think

Pang plays like a tasty soup of other arcade games but with nice soapy flavoured croutons floating on top. It's fun, frantic and incredibly addictive and boasts some fine home conversions too. What's not to like.

The Mysterious Crash

Due to its popularity, there were a huge number of *Pong* variants around at the time.


Studio II FROM RCA
A NEW KIND OF VIDOGAME THAT OFFERS YOU AN UNLIMITED CHOICE OF GAMES FOR MORE FUN!
NEW!
RCA
STAYS NEW & FRESH!
MORE TO COME.
DISCOUNT PRICES PLUS S & H GREEN STAMPS
Garrett's Furniture

An early advertisement for the RCA Studio II from April 1977. It would be pulled from the market about a year later.

Long a mystery to videogame aficionados on both sides of the pond, the gaming crash of 1977 has long been discussed. Marty Goldberg takes you behind the myth and reality of the games market shakeout – which actually occurred in 1978

For many years now, videogame fans have been treated to whispers of a 'first videogame crash'. A crash that was said to have occurred in 1977 as manufacturers of dedicated consoles – those consoles that just played *Pong*-style games – ran in droves from the industry in fear of the programmable consoles like the VCS. Well, we're here to tell you it didn't happen… at least not anything like that way.

Yes, there was a 'shakeout' as the US consumer industry moved towards programmable consoles, but it was a gradual change that also faced some stiff competition from a new class of entertainment devices: electronic handheld games. What follows is the story behind the series of events leading up to that period and their results.

It starts in 1975 with the development of two different classes of electronic entertainment devices that would shape the years to come. One is a programmable home gaming console released first by electronics company Fairchild, its first entry in to the field. The second is a handheld driving game by toy company Mattel; also representing its first steps in to apparently lucrative consumer electronic entertainment field being lead by Atari's home version of *Pong*. We'll start with the programmable consoles first.

Fairchild Semiconductor was the first to jump into the market with its programmable console, seeing it as just another entry into the market. With market research done by outside contractor Gene Landrum that suggested the look and functionality of the console, Fairchild had been planning its console for some time, lead by the efforts of employee Jerry Lawson. Although using microprocessors to allow software based games instead of engineered games was the next logical step to many in Silicon Valley. Fairchild had come to its decision to do a console via Jerry's clandestine efforts to build a microprocessor-based arcade game – arguably the first.

Building it in his garage and testing it at a location in the Valley, Fairchild was clearly upset at first with an employee doing a project like this on the side. Its tune quickly changed when it realised it could have Jerry take over from a contract with the outside firm they had designing its own home videogame system that was going sour. Soon Jerry was heading the new game division, with a sizeable discretionary budget and hiring on new personnel to aid in reaching his vision: a fully programmable home videogame system based on the Fairchild F8.

Fairchild's console, called the Video Entertainment System up to its release, was unique in design. It wasn't just the combination joystick/paddle controllers in a unique single stick format, but the gigantic eight-track tape cartridges that contained the game code on ROM chips that are loaded and run by the microprocessor. Fairchild's console was debuted at the summer '76 Consumer Electronics Show in Chicago as the Fairchild Channel-F, sending a clear message to the press and the industry that the still new home game industry had just upped its 'game' again. ►

The electronic games that almost brought down videogames

Mattel Electronics Football/ Football II

There was a time in the late Seventies in America where it seemed every kid was issued this game by right of birth. Even though everything was basically represented by LED dashes, it was a big step up from the previous popular football offering for kids in the form of football player statues vibrating on a tin field. Honourable mention also goes to its main competitor, Coleco's *Electronic Quarterback*.

A prototype of an electronic tabletop game Atari was going to produce. Only its handheld version of *Touch Me* was ever produced.

MATTEL: I'm Football One... Mattel's lowest priced electronic football game.
COLECO: And I'm Electronic Quarterback...Coleco's lowest priced!
MATTEL: I run from the line of scrimmage.
COLECO: I start in the backfield and follow my blockers.
MATTEL: Blockers? I don't have any blockers.
COLECO: I've got seven men on defense.
MATTEL: Seven? I've only got five.
COLECO: I can even pass!
MATTEL: I can't pass.
COLECO: My receiver runs short, long, any pattern.
MATTEL: Pattern? I don't even have a receiver.
COLECO: Or I can score a safety!
MATTEL: A safety?
...(Fade...)
ANNOUNCER: (VO) Coleco's Electronic Quarterback. A lot more football for the money.
This commercial is running now.
On a heavy Network and Spot TV schedule.
Can you afford to be without Coleco?
COLECO

Coleco's *Electronic Quarterback* was another big seller, and Coleco made no bones about going after the number one Mattel.

Reviews were actually positive for the system, and many journalists began questioning the relevance of the plethora of new *Pong*-style consoles entering the market at the time. It wasn't enough to scare the increasing wave of *Pong* clones at the time though; including Atari's own self-branded entry into the home market (it had only released the Sears-branded *Tele-Games Pong* the year before).

The concept of a programmable console and its importance in the big scheme of things is not to be underestimated, but at the time it was anything but a sure bet on the home market. The ability to have games that could be interchanged on the console at will was certainly a positive step forward. However, while the technology was indeed favourably reviewed at the time, a game console is still only as popular as its games. While the ability to potentially offer an unlimited amount of games on a single console now was a plus, the offerings for the Fairchild Channel F were anything but stellar… it lacked any star power.

That was the advantage that Atari felt it had when it started working on its own programmable console in 1975, before its Sears branded *Home Pong* had even hit the shelves. Nolan Bushnell, Steve Bristow, Al Alcorn and the guys at Atari's think tank Cyan all knew that dedicated game consoles had limited shelf life. "Nolan, and Joe (Keenan, Atari President), and I sat around as a team and decided we needed a cartridge based game system," says Al Alcorn. With Al giving the go ahead to Milner and Mayer to being the research, by January '76 it had a full proof of concept finished based around a home version of Atari/Kee's recent arcade hit *Tank*.

When it moved to developing the full console down at Atari, Al knew that they needed to keep the revolutionary console a secret from competitors, but also more importantly from a lot of management. "My job was to keep the hounds away from these guys. To keep away the corporate bean counters and just let the engineers do their job. Which was about fifty percent of my time."

So he rented a secret location far away on Division Street to let the now expanded team do their work. That still didn't keep it from outside influences though, but that's a good thing. The team knew full well about Fairchild's soon to be released console because Jerry Lawson and some of the engineers at Atari (including Al) were friends. Jerry was even able to share how he solved a big problem that plagued the early development of programmable consoles – static electricity generated from plugging and unplugging the game ROM cartridges. So Atari watched intently as the Channel F was shown off at the June '76 CES and then hit the market that November.

As stated, Atari hoped it was coming up with solutions to the problems the Channel F was faced with by having home ports of its arcade games in mind from the start. To that end, when it came time to create the full console and its custom graphics chip, Al was smart and had a group of programmers put together right away. The programmers actually weighed in on hardware in the custom graphics chip they'd need to port the arcade games. The Channel F didn't have the input of game designers, just engineers and marketers making forecasts. Atari's programmable console would launch with a fleet of games, some new and some based on arcade originals, and a console that fully supported the many games to come in the future. Not to mention a proven resource for inventing those new games.

Even with all this going for them, by the time Atari was ready to show off its own programmable console at the June '77 CES show, it was still skittish because of Fairchild's lack of performance on the market. Not to mention that RCA had also surprisingly joined the market that January selling its programmable Studio II console through RCA dealers, and they were also under performing. Even though the technology behind these consoles was better, there just wasn't anything making them stand out on the market against the plethora of other game consoles, even if they were all dedicated. In fact, at that point in time there were a total of 171 dedicated game consoles already on the market worldwide or entering it that year.

So Atari hedged its bets by designing a dedicated console competitor to its programmable console called Tank II. Also based around the

Space Invaders to the Rescue

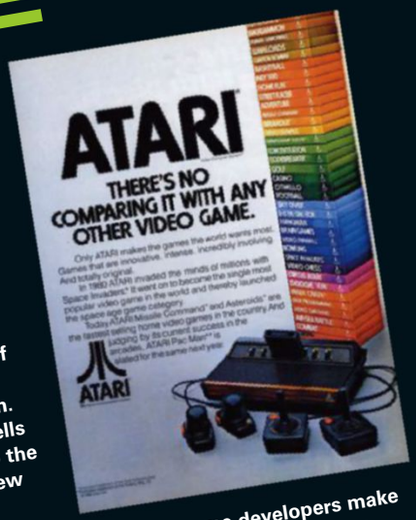
WE'VE BROUGHT THE BEST OF THE ARCADES TO ATARI®
COMPATIBLE CARTRIDGES
INTELLIVISION® GAME SYSTEM OWNERS GET IN ON THE
COLECO FEVR. TOO!
PRIMA-POWER® BATTERY ELIMINATOR KEEPS THE ACTION
THEY'RE HERE! TH
WITH YOU!

Coleco's tabletops in 1982 were pretty much the last popular product of the handheld industry, which had already drastically shrunk in favour of home videogame consoles thanks to Atari's 1980 release of *Space Invaders* for its 2600. The consumer industry simply became dominated by programmable consoles after that.

What saved Atari's consumer efforts and really helped bring the home videogame market into its golden age were two different events. The first was when Ray Kassar was installed as President of Atari after the removal of Nolan from the board; he instituted immediate efforts to rescue the VCS including promoting sales of the VCS all year around. Where before home consoles were just promoted during the holiday season, now Atari would be undertaking marketing efforts throughout the entire year to promote sales. Including magazine ads and TV commercials, sales of game cartridges and consoles were boosted.

The second event was the acquiring of the home rights of a hot new arcade title, in this case one that Atari didn't own. As Warner's Manny Gerard tells it, he was on his way over to the Engineering building to review the progress of the various projects in development, and was greeted by a large crowd of employees excitedly talking and cheering. Walking over to see what the fuss is about, he sees they're huddled around several Space Invaders machines they had just shipped in from Japan to size up. Making a beeline back across the street to corporate he gives the orders: "Get us a license for Space Invaders and have the game developers make that game on the VCS. If you can't get a license, steal the gameplay and make the game under a different name." Ray managed to snag a license and the game became the first killer app for the VCS, with people buying it just to play that game. With that, the VCS entered its golden years.

SPACE INVADERS
VIDEO COMPUTER SYSTEM™
GAME PROGRAM™
112 VIDEO GAMES
MOVING SHIELDS • ZIGZAGGING LASER BOMBS • FAST LASER BOMBS • INVISIBLE INVADERS
CX 2632



arcade game *Tank*, the plan was to see how well each was received at the show and go from there. As if that wasn't enough, Atari was also releasing five more dedicated consoles that year – *Super Pong Pro-Am, Super Pong Pro-Am Ten, Ultra Pong, Ultra Pong Doubles*, and *Video Pinball*. If that wasn't a sign that having two programmable consoles on the market wasn't causing a stampede out the door, the 94 other dedicated consoles also being released worldwide by competitors that year were also a rather strong indicator.

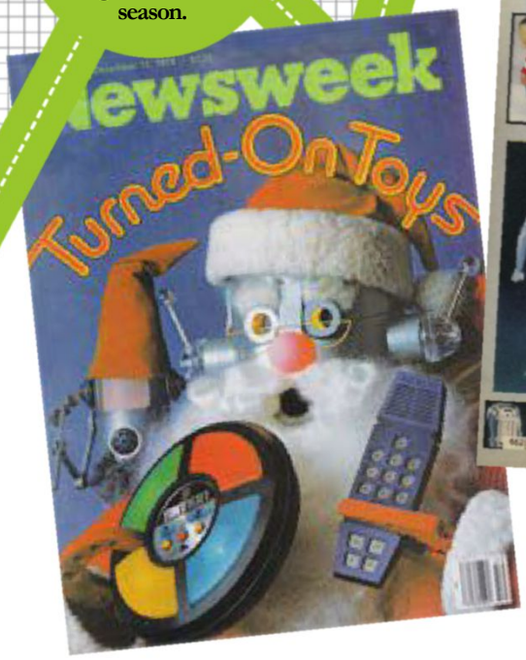
In fact, dedicated consoles in 1977 were for the most part still selling for full price, just under $100 for the ones just being released that year compared to the $139.97 for the Fairchild Channel F and $156.99 for Atari's now unveiled Video Computer System or VCS (which did beat out the Tank II console in orders, leading to the latter's demise). At the end of 1977, while the VCS was popular and sold out of its limited 400,000 unit run, the King in sales were still the dedicated consoles at the comparably cheaper but far from fire sale prices. Fairchild's Channel F had still only sold 250,000 units over the past two seasons (videogame consoles were only promoted from September through to Christmas in those days). RCA, at the bottom, didn't last far past that initial holiday season and left the market in March '78.

It was during the next holiday season in 1978 that the bomb hit. No, it wasn't dedicated games exiting the market, though their entry slowed from the previous year, another 45 were released in 1978. Rather it was in the form of these small handheld electronic games that had also debuted in 1976 and had been slowly gaining momentum.

Created by Mattel Toys executive Michael Katz, the idea had come to him in an 'a-ha' moment during 1975. The US was just coming out of the losing end of the market it created – electronic calculators – after a bitter price war with Japanese manufacturers. Initially leading to the very creation of microprocessors with Intel's 4004 chip, by all accounts the US should have been dominating it. However, the Japanese started taking over with cheaper components that soon lead to a shakeout, allowing only the big chip manufacturers in the US to remain in the market and then even they were looking to exit. With calculator components in cheap abundance, Michael thought what if the technology could be used to create handheld electronic games? "It was my idea to have handheld games in the first place. I had asked Richard Chang to design a game – this is when LED calculators were popular – and I was in charge of new product categories at Mattel. Richard was the head of the sort of 'state of the art' futuristic group. I asked if he could design me a game that kind of looked like a calculator… with an LED, but it was an interactive game. *Auto Race* was the prototype."

The result was deemed promising enough that a new division was formed at Mattel, called Mattel Electronics. Several games were created, including a handheld American Football game. According to Mattel Electronics' Howard Cohen, the games were programmed at Rockwell Microelectronics Division using modified MOS-FET (Field Effect Transistor) handheld calculator chips. As he told the Handheld Museum's Clint Dyer, "Basically a ►

> **"I asked if Richard Chang could design me a game that kind of looked like a calculator"**
>
> MICHAEL KATZ, MATTEL TOYS EXECUTIVE



The cover of the 11 December 1978 issue of *Newsweek*, trumpeting the domination of handheld electronic games that season.

As this page from the popular *Sears Catalog Wishbook* from Christmas 1979 shows, electronic toys only continued to expand in popularity and format. It seemed every toy had to be futuristic and driven by microcontrollers.

THE ELECTRONIC GAMES THAT ALMOST BROUGHT DOWN VIDEOGAMES

SIMON

Who hasn't played this tabletop game of matching coloured patterns and sounds? On the market constantly in one form or another from 1978 to this day, it was a runaway hit for uber designer Ralph Baer. Interestingly, Nolan Bushnell thought he could improve on Ralph's game *Tennis* from the Odyssey, and he did with Al Alcorn's *Pong*. Ralph responded in kind by improving on Nolan and Steve Bristow's coin-op *Touch Me* with *Simon*.

calculator chip was modified to make it output the necessary signals to drive the game display appropriately. Part of the reason that the little blips on these games are dashes is because they are basically the little segments of the number eight on a calculator display."

It was a curious scene at the 1976 Toy Fair when there among *Six Million Dollar Man*, OJ Simpson, and *Space:1999* dolls was a futuristic looking toy by Mattel called *Auto Race*. It was *Auto Race* that Mattel had decided to debut the new class of toys with, and it was a decent success during the 1976 holiday season. Enough so that it was followed in 1977 by *Electronic Football* and a number of entries by other companies that were changing more traditional board games into an electronic format such as Milton Bradley with its *Electronic Battleship*. It seemed everything in the toy industry was being updated to the futuristic new electronic toy format in fact. "The growth reflects an increasing use of and fascination with computers and electronics. Today's toys introduce children to modern technology and the novelty inherent in contemporary living," said Dr. Brian Sutton-Smith, child psychologist and research consultant to the Toy Manufacturers of America at the time.

That growth of these toys sometimes referred to as 'hand-held calculator games' only seemed to explode in 1978 even if Sears almost threw a wrench in it for the '77 holiday season. Production of *Electronic Football* and *Auto Race* were initially halted because one of the major vendors of the game, Sears, had come back to Mattel and stated *Football* wasn't initially selling well. Leaving only 100,000 units of Electronic Football for sale meant it quickly sold out. Sears came back to Mattel in mid-January 1978 and said "Oops." Asking to start up orders again at a rate of 200,000 a week, the other retail sales soon increased the demand to 500,000 units a week by the next month. At that rate, Mattel's handheld games were outselling all the videogame consoles sales put together.

It followed with more games for the 1978 holiday season, including *Armor Battle, Baseball, Basketball, Football 2* (the new restarted version of Mattel Football), *Hockey, Soccer, Battlestar Galactica Space Alert* and *Sub Chase*. The electronic handheld game market actually became an actual market in 1978 as Mattel was joined by toy companies Bandai, Entex, Galoob, Mego, Milton Bradley, Parker Bros, Pulsonic, Tiger and the company that would be its biggest competitor Coleco. Even Atari had gotten into the act by planning a series of electronic board games and handhelds, though only one handheld game based on its *Touch Me* arcade game would make it out – also in 1978.

What it all meant was that the scene was pure insanity once the holiday season rolled around, as handheld electronic games were the in-demand gift over videogames, raising the toy industry into a $3.3 billion business. As the *Milwaukee Journal* reported on 11 December, 1978, "A stampede of buyers has cleaned many Milwaukee area stores out of the most popular electronic games. Brisk sales in early November reached a peak during the traditionally heavy weekend after Thanksgiving and many shelves were picked clean." Beverly Cannady, the manager of marketing public relations for Mattel stated, "We cannot supply our customers fast enough." Across the US, games like Mattel's *Electronic Football* and *Basketball*, Coleco's *Electronic Quarterback*, and even Milton Bradley's tabletop electronic hit *Simon* were reported completely sold out by early December.

It all spelled one thing for the consumer videogame industry: disaster. At around $30 apiece, these new toys were selling for far less than dedicated videogames and just a little more than the game cartridges for the programmable consoles. The immediate advantage for kids was that they were portable. The built-in calculator display also meant that parents didn't have to give up the television. It led to a common scene across America during recess and lunchtime: groups of kids with their faces buried in these handheld LED games, and in the cases of games that supported two-player alternating gameplay like Mattel's *Electronic Football*, passing them quickly to their friends as their virtual LED teams competed.

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Bally's sole entry into the consumer market. The console would not survive at Bally, who was looking to sell it off during December 1978. They would the following year, to Astrovision.

Award for *Merlin* given in 1980, declaring it the Toy Of The Year by the Toy Manufacturers Of America. The fact that it was given two years after its release shows just how popular these games still were.

THE ELECTRONIC GAMES THAT ALMOST BROUGHT DOWN VIDEOGAMES

MERLIN

Designed by a Harvard PhD by the name of Bob Doyle around the same time as *Simon*, this unique handheld electronic game seemed to combine the best of LED games and Simon by offering a matrix of LEDs and futuristic tones that were able to represent a multitude of games like *Tic Tac Toe* or *Blackjack* – or even turn into a musical instrument. With a long shelf life that lead it into the Eighties, in 1980 it was voted the best selling toy of the year by the Toy Manufacturers of America.

The impact on the consumer videogame manufacturers was immediate. Back in March 1977, the *Chicago Tribune* did a survey of home videogame dealers and manufacturers, and stated, "While videogame sales in 1976 totalled an estimated 3.5 million units, they are expected to double and redouble within the next two years." At the end of the Christmas season, one anonymous executive stated to the *Tribune*, "Our industry hasn't reached any of its projections. Everyone is a little gun-shy right now." For the dedicated consoles, their day had passed. While a few international companies trickled out newer dedicated consoles in 1978, the majority exited the business. In the programmables, Fairchild wound up getting out of the home console business all together and selling off the Channel F and the in development Channel F II to electronics manufacturer Zircon before the year was out.

Newcomer Bally, who had entered the home console business via mail order in the latter half of 1977 with its Bally Professional Arcade system, was already talking about exiting in December of 1978. Mattel almost shut down the development of its own entry into programmable consoles, the Intellivision. And Coleco exited the home console business as well, with several dedicated consoles and its Telstar Arcade wanna-be programmable console from 1977 (which was simply a dedicated console that swapped out the dedicated game circuitry on triangular cartridges) its last offerings on the market until the surprise release of the Colecovision in 1982.

At Atari, while not leaving the consumer industry, the effect of all this was just as serious. The first casualty was the Super Game Brain, a console it showed off at the June Consumer Electronics Show that was similar in concept to Coleco's Telstar arcade, allowing Atari to hopefully move its now growing stockpile of dedicated game chips. It never made it to the end of summer. The next was the VCS, which was almost a casualty, at least if Nolan Bushnell had been given his way. You see, Atari had grossly overestimated the potential sales for the 1978 holiday season and manufactured 800,000 VCSs. The problem was, after the initial orders for around 550,000 units were placed during the early Summer, the orders just stopped.

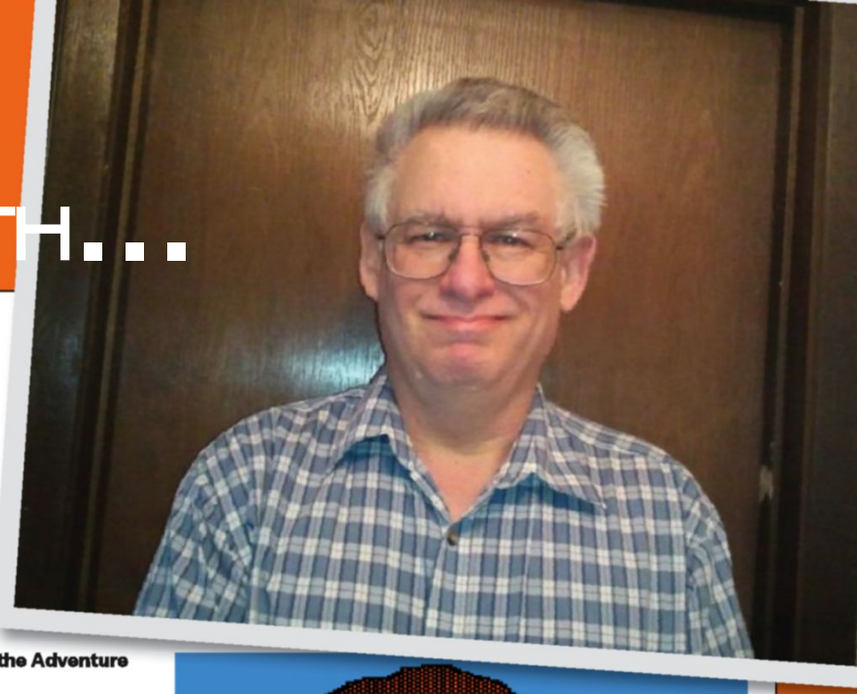
The losses were threatening to bring the company down, and Nolan stood up at the budget meeting in late 1978 and started ranting wide-eyed "Sell off all the inventory of the VCS, we've saturated the market!" He also wanted to cancel Atari's soon to be released entry into home computers. Warner's Manny Gerard and Atari's Ray Kassar were willing to play chicken with the home console market, having faith it would revive. After some secretive efforts to try and take control of the company from Warner, Nolan was 'put on the bench' and relegated to purely advisory status, formally resigning from the company in January 1979. On the single positive note, by early 1979 it meant that Atari was sitting atop of the new consumer industry, with only the newly released Magnavox Odyssey2 in a very distant second. Manny and Ray would go on to lead the company and the VCS to both its glory years and eventual downfall.

As for the electronic handhelds, they continued to be very popular over the next several years, changing formats to VFD and LCD displays, but were ultimately overshadowed by the golden years of the home console industry.

> **"[Videogame sales] are expected to double and redouble within the next two years"**
>
> CHICAGO TRIBUNE, MARCH 1977

A MOMENT WITH...

Scott Adams



This month we talk to Scott Adams, the man who brought text adventures to home micros. Paul Drury types ASK QUESTIONS.

Who is Scott Adams?

Inspired by playing *Colossal Caves* on a mainframe computer, Scott wrote his first game, *Adventureland*, in 1978. He set up his own publishing house, Adventure International, and released many classic titles, including *Pirate Adventure*, *The Count* and *The Incredible Hulk*. He has just released *The Inheritance*, his first new game for a decade.

You're back with a new adventure game! What prompted you to start writing again?
I actually started this game Christmas day 2002! I've worked on it on and off over the years, mostly off, I'm sorry to say. I thought it would be wonderful to finally finish it after ten years! I started in earnest last spring. I was a guest speaker at the Midwest Gaming Classic and I showed my unfinished game there. The audience response let me know I needed to get back to work and finish the game. The more I worked on it the more excited I got about it.

» This advert appeared in Personal Computing magazine in March 1981 and shows Adventure International had grown into a major publisher. Scott: "My friend Tony Brentlinger posed as the pirate. He had a gold front tooth and that is his own facial hair, so I thought he'd be perfect!"

Tell us a bit more about *The Inheritance*. Is it a very different kind of game to those you wrote back in the Adventure International days?
It's still a Scott Adams adventure through and through. The main difference is I'm able to take advantage of more memory and I have a much better parser for the language in place. I have also added sound effects for fun and included Easter eggs for all the folks who played my classic games.

In the game, the player carries a Bible and can refer to it for clues to solve certain puzzles. Thus you have included the entire text of both the Old and New Testaments!

Are you trying to educate as well as entertain?
I am hoping folks come away with a better knowledge of the Bible. I have people who have never even read a Bible telling me the game is fun and the use of the Bible as a reference was not a detraction at all.

Back in the late Seventies and Eighties, text adventures were a huge part of the games industry. How did you feel, watching them slowly become marginalised?
It didn't bother me at all. As Song of Songs says: There is a season for everything. [Roxanne, Scott's wife, adds her own response] Yes it did bother you. You thought you were a washout and got depressed sometimes, thinking you were a 'has been'… and I didn't think so.

Thanks Roxanne. Scott, what is your view on adding graphics to text adventures – do they enhance the game at all or distract from the experience?
So many fans have told me that graphics can never match the pictures they have of the worlds I created in their mind's eye. How often do you buy a novel with pictures?

If you could only recommend one of your games for readers to play, what would it be and why?
The Inheritance. I honestly think it is the best work I have ever done.

What's your proudest achievement in the games industry?
Being one of the original founders of the entire home computer gaming industry.

» Scott's fine head of hair made a cameo in the Apple II release of Pirate Adventure.

» Scott's new game *The Inheritance* combines traditional text adventuring with Biblical references.

And your biggest disappointment?
Not working on *The Inheritance* in the last ten years with the zeal I now have for it.

Which other industry veteran do you most admire and why?
Bill Gates. He took an industry that was fragmented and gave a common platform to develop on. 90% of all computer gaming has been geared to the Wintel world for most of the last 25 years.

How would you like your games to be remembered?
As something that gave joy, increased knowledge and helped people desire special goals in their life.

Visit www.ScottAdamsGrandAdventures.com to play a free demo of *The Inheritance*.

» Scott posing with three beautiful models: A TRS-80 Model 4, TI99/4a and an Apple II.

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Theme Hospital

A HOSPITAL WHERE THE CURE IS AS BAD AS THE CONDITION

RETROREVIVAL

» PC
» BULLFROG PRODUCTIONS
» 1997

Only Bullfrog could take an idea as humdrum as running a hospital and turn it into a genuine slice of computer entertainment.

After Bullfrog found success with *Theme Park*, it looked for another potential candidate for a similar simulator. The end result was *Theme Hospital*, which traded in the paying customer for sick patients, theme park attendants for hospital staff, and wild rides for diagnostic and psychiatrist rooms.

It sounds like an awful idea on paper, but it works brilliantly, mainly because the gameplay is so well structured and each new management element is carefully introduced. Initially you'll only have access to small hospital and must fill its floor space as best you can. A receptionist and desk will allow you to receive patients; doctors will diagnose and perform treatments on them; while nurses will assist at useful locations like the pharmacy. Oh, and janitors will look after plants and generally clean up when patients get too sick.

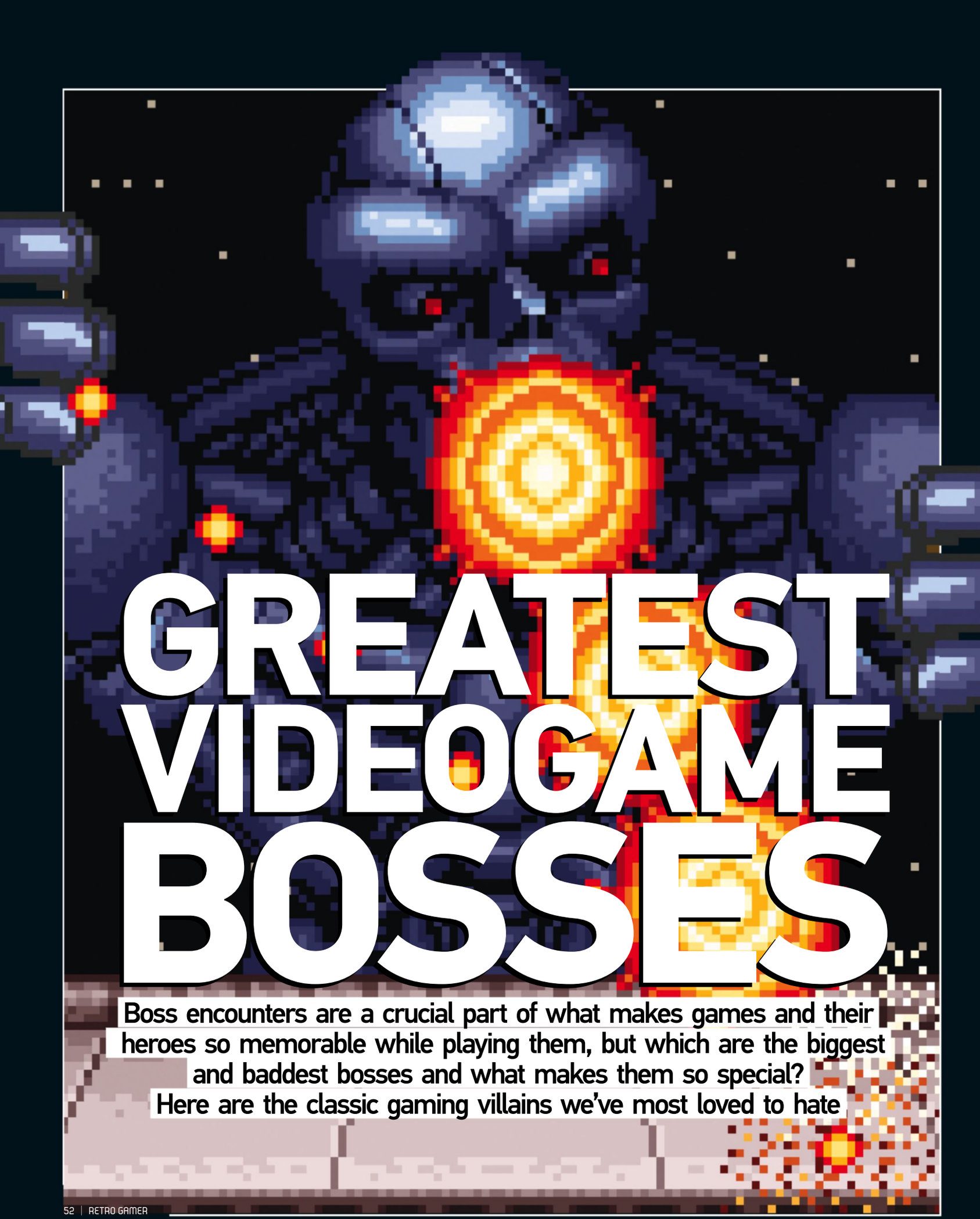
You'll be performing against different tasks that range from receiving a set amount of money to curing a certain number of patients. VIP visits and generally keeping your patients happy while they wait will constantly keep you on your toes. And patients being patients will moan often, whether it's complaining about the lack of seating, or griping about wait times. You'll need to do whatever you can to ease their visits, whether it's getting in an extra janitor to water those thirsty plants, or simply adding more radiators so your hospital stays nice and toasty.

All these elements are cleverly introduced, along with genuinely funny ailments that range from Bloaty Head, to Slack Tongue and Hairyitis. The cures are often just as hilarious as the symptoms and display Bullfrog's typically dark sense of humour. Bloaty Head is solved by the patient's head being popped with a sharp pin, while Slack Tongue sees the tongue being cut off with a slicing machine.

While it is amusing discovering new ailments and seeing their respective cures, it's the tightly designed gameplay and constant juggling of resources that constantly pulls us back for one more go.

incredibly annoyed at the way you
ospital. And I can't say I blame them.
ther or face the consequences!

Diagnosis progress



GREATEST VIDEOGAME BOSSES

Boss encounters are a crucial part of what makes games and their heroes so memorable while playing them, but which are the biggest and baddest bosses and what makes them so special? Here are the classic gaming villains we've most loved to hate

Doctor Robotnik

From: *Sonic The Hedgehog*
Aliases: Doctor Eggman, Eggman, Doctor Ivo Robotnik

His look is said to have been based on Theodore Roosevelt, but in terms of his character Robotnik is gaming's equivalent of the coyote from the *Road Runner* cartoons. He's a hapless lunatic that builds machines designed to get the better of a quicker adversary. Often forced to wear egg on his face at the hands of Sega's blue mascot, maybe that's where his Japanese name comes from.

How to beat it: Well it varies from game to game. You generally get to face off against Robotnik and one of his contraptions at the end of each act. Some obvious general advice then – make sure you have a lot of rings, and try your best to keep hold of them.

Andross

From: *Star Fox*

The first incarnation of Andross is further proof that a large disembodied head with an insatiable appetite will cause both undergarment ruining and chord striking among gamers. Like a cross between William's *Sinistar* and the creepy robot head from Atari's *I, Robot*, Andross gives a memorable fight that provides both an epic and challenging close to this SNES classic.

How to beat it: Attack his glowing eyes, keep the Arwing moving from left to right and barrel roll when he spits out those metal tiles. Do this until the face shatters and Andross's true form – a monkey face in a cube – is revealed, and then focus your fire on that. Repeat the process and that's usually enough to send him on his way.

Willy

From: *Double Dragon*
Aliases: Machine Gun Willy, Big Boss Willy

Willy sets out his villainous stall brilliantly at the start of *Double Dragon* by turning up on the Lee brothers' turf with his gang, giving the order to sock their girlfriend in the breadbasket and carrying her off to their hideout. Not only is it one of the most iconic openings in videogames, but also all the motivation and characterisation you needed to set forth, rescue her and stick Willy's machine gun where the sun don't shine.

How to beat it: Well, you could exploit the balcony glitch, though this can be more time consuming, or you could just grab the baseball bat, and use it to take down as many of his gang members before Willy arrives on the scene. Then pummel him with close attacks so that his trigger finger hardly touches his gun.

Nemesis

From: *Resident Evil 3: Nemesis*

Nothing is scarier than an enemy that just doesn't know when to quit, one that, to quote Kyle Reese from *Terminator*, 'can't be bargained with. It can't be reasoned with. It doesn't feel pity, or remorse, or fear. And it absolutely will not stop, ever, until you are dead.' Well, this is exactly the type of enemy that players came face to face with in *Resident Evil 3: Nemesis*. The titular boss is a creation by series' bad guys the Umbrella Corporation and was designed with the sole intention of basically hunting and eradicating S.T.A.R.S members.

Players' first contact with the creature saw him killing off helicopter pilot Brad Vickers before turning his attention towards them, Jill Valentine. The cat and mouse horror adventure that follows sees Jill and Nemesis cross paths at various points in the story (sometimes mandatory, other encounters based on player choices), and Jill throwing everything at the thing in a desperate bid to stop it.

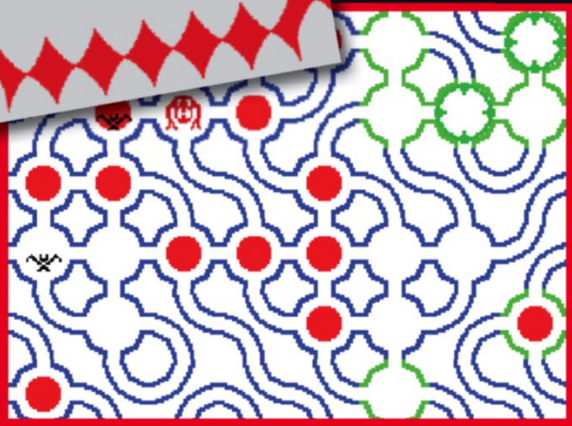
How to beat it: The trick to defeating the final 'mutated' Nemesis is to keep your distance and use your most powerful weapons (Grenade Launcher and Magnum) against him. You can only defeat the Nemesis by activating the Rail Gun, and this is done by connecting up three batteries to power it. Two blasts of the weapon and job's a goodun. Or is it?

Super Drunk

From: *Bubble Bobble*
Aliases: Formerly Mr and Mrs Bub and Bob

Super Drunk is basically an inflated version of one of the standard enemies in *Bubble Bobble*, but that doesn't make him unmemorable. Waiting for you on level 100, and standing between Bub and Bob and their kidnapped gals, Drunk can only be defeated with the help of lightning-charged bubbles. Get the true ending to the game though and there's a neat twist to the boss's back story – the boys learn that their missing parents were actually transformed into Super Drunk by 'someone'. The game doesn't elaborate who that someone is, but our money's on that despicable Baron von Blubba.

How to beat it: Collect the lightning vases at the top of the screen, which allow the brothers to create lightning charged bubbles. The powerful bolts can then be launched at Super Drunk by popping them.

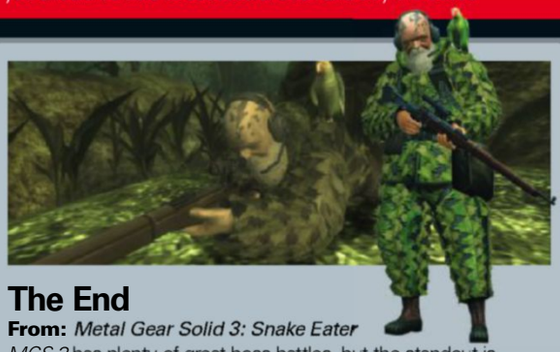


Wumpus

From: *Hunt The Wumpus*

This text based BASIC game from 1972 is widely seen as one of the earliest examples of a survival horror game. Using a command line interface, players had to blindly negotiate a deadly labyrinth of chambers and kill the monstrous Wumpus before it killed them. This was achieved by correctly determining which chamber the Wumpus was in and firing your arrow inside it to kill it. If you entered the chamber the Wumpus is inside then he would kill you, and if you fired your arrow into the wrong chamber you instantly alerted him to your whereabouts. A tense game of hide and seek, the eponymous Wumpus was finally given a face in the 1980 graphical remake/conversion for the TI-99/4A, though the core gameplay remained the same

How to beat it: The game plays in a similar way to *Minesweeper* in that you must determine the location of a hidden target via visual clues. As you explore the cave you must note which of the chambers contain blood splats, as these tell you that the Wumpus is nearby. Through a process of careful elimination you should be able to successful track and slay the beast.



The End

From: *Metal Gear Solid 3: Snake Eater*

MGS 3 has plenty of great boss battles, but the standout is Snake's encounter with The End. A great example of *MGS* boss battles at their best – a pairing of imaginative and boss and creative scenario, it's the videogame sniper dual to end all videogame sniper duals. This epic battle of cunning, aim and wits takes place in an expansive forestry area, and pits you against a legendary sniper dressed in a ghille suit that prevents him being detected by thermal goggles. Though Snake cannot be killed by The End (the boss fires tranquilizer darts and will simply attempt to capture Snake), the battle is still incredibly tense, with Snake having to carefully track and kill his target under a heavy sense of vulnerability before he does the same to him.

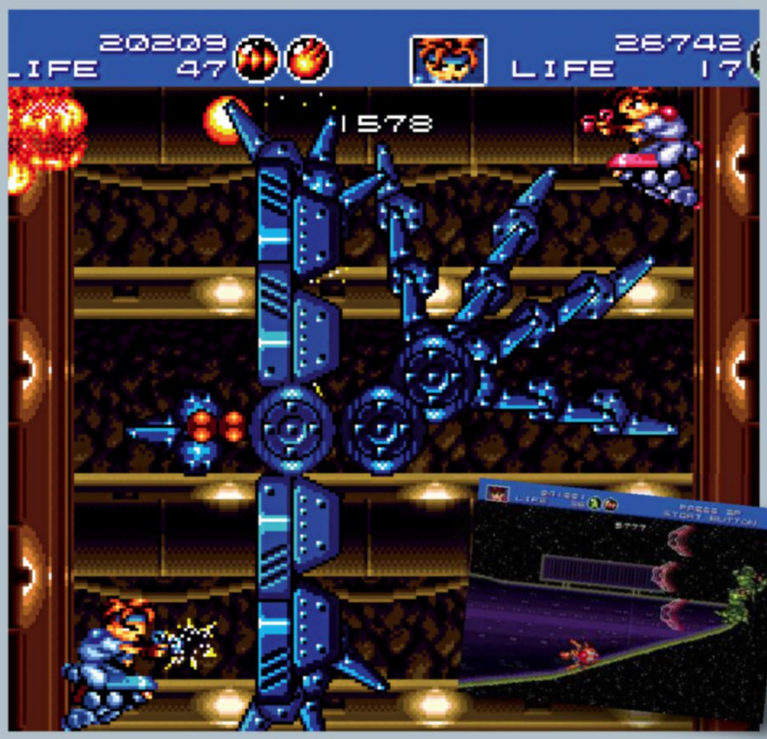
How to beat it: The End gives off no heat signature, so a good trick is to use the thermal goggles to spot his pet parrot that sits on his shoulder. Alternatively set your PS2's clock a week ahead during your battle and nature will finish him off instead.

Seven Force

From: *Gunstar Heroes*

Gunstar Heroes contains a number of great boss battles, but the most popular among its fans is Seven Force. Fought at the end of the game's exhilarating mining level stage, Seven Force takes its name from the fact it has seven different forms which it can change into randomly during the fight. Each 'Force' has its own look, behaviour and attack pattern, meaning there's a lot to take in and an unwelcome sense of unpredictability fused to the battle. Seven Force always starts off in his Soldier Force, a giant running robot, but can transforms into a crab, tiger, urchin, eagle, a lashing tail, and a handgun (which may or may not be homage to *Transformers*' head antagonist Megatron). Naturally, there'll be some you'll prefer facing than others.

How to beat it: As space is short we'll offer you some general tips to take down this foe. Typically you only have to face five or his seven forms, position is paramount (try to keep your distance from it) and the homing weapon is generally best to use.



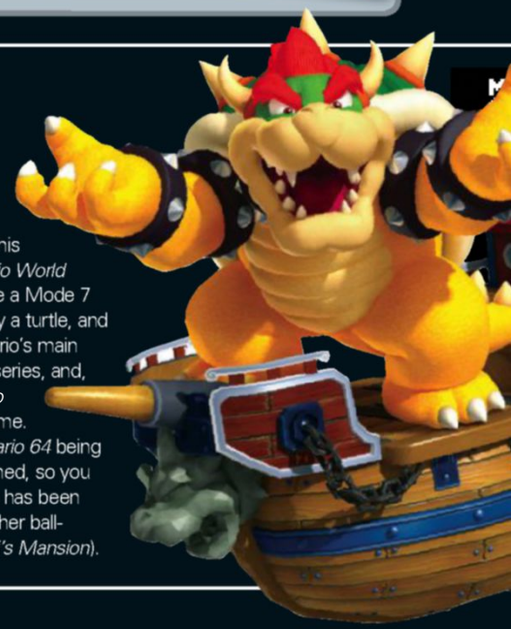
Bowser

From: *Super Mario Bros*

Aliases: King Koopa, The Sorcerer King

Bowser battles often leave an impression on gamers. From the boss's first appearance in *Super Mario Bros*, which saw players dodging his fireball attacks for the entirety of his castle stages, to the final battle in *Super Mario World* that saw Bowser dropping bombs from inside a Mode 7 powered flying contraption. Bowser is actually a turtle, and was named after a Korean soup-like dish. Mario's main antagonist has become an iconic part of the series, and, with the exception of US version *Super Mario Bros 2*, has appeared in every main *Mario* game.

How to beat it: In most games (*Super Mario 64* being the obvious exception) Bowser can't be touched, so you defeat him by other methods. In the past this has been pools of hot lava, or throwable Koopas and other ball-shaped objects (*Super Mario World* and *Luigi's Mansion*).



M Bison

From: *Street Fighter 2 – The World Warriors*

Aliases: Vega, Master Bison, Mighty Bison

The ominous kingpin of the crime organisation in *Street Fighter* land, M Bison's look is said to have been inspired a cape-wearing villain from the violent manga Riki-Oh. Making his first appearance in *Street Fighter II*, Bison's militant uniform is reminiscent of those worn by SS officers of Nazi Germany, which only adds to his sense of menace. In terms of power and threat, Bison is everything you'd want from a fighting game boss, and like all the best ones isn't without his fans. There is also debate over what the M in his name stands for. Originally some assumed it stood for Mike (on account that the name was originally given to the Mike Tyson-inspired boxer character Balrog), though in the *Street Fighter* games Bison has referred to himself as both Master and Mighty Bison. Come to think of it, who cares?

How to beat it: Bison's attacks are largely made up of special moves, so use this to your advantage. Learn to read and block his special attacks and counter accordingly. The Double Knee Press is a good example, as a successful block will leave him wide open.

Robot Skeleton

From: *Contra III: The Alien Wars*

After dispatching two annoying Terminator clones, Jimbo and Sully face their biggest nemesis yet… An even bigger Terminator clone. Breaking through the doors of a cargo door, the huge robot starts filling the room with fire, only stopping to throw out timed bombs that fill large parts of the screen upon exploding. There are plenty of great *Contra* bosses, but this is easily the most memorable.

How to beat it: This giant robot spits out massive gouts of flame, so you need to stay constantly on the move in order to avoid it. Dodge the bombs he throws out and continually aim for the head.

Dobkeratops

From: *R-Type*

The name on his birth certificate reads Dobkeratops, but this boss is more widely referred to as 'the first boss in *R-Type*' – it rolls off the tongue better. With perhaps the exception of another space dwelling boss on this list with a game named after him, Dobby is probably the most iconic boss in shoot-'em-ups. That moment at the end of *R-Type's* first stage where the screen turns dark and this imposing looking guardian, which shares an uncanny likeness to the Xenomorphs from the *Alien* films, slides into view is iconic, terrifying and memorable. Earning instant reverence among shooter fans, the creature has appeared in several sequels, including *R-Type III* and *R-Type Final*.

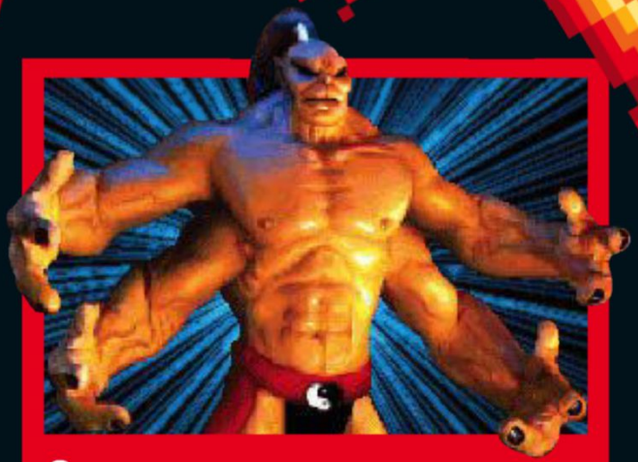
How to beat it: Dobkeratops' weak spot is found on its belly. Remove his unsightly alien growth with plasma blasts, watch the guardian turn into loads of little explosions, then wash your hands.

Mutoid Man

From: *Smash T.V.*

In terms of memorable first stage bosses, few are as iconic – or challenging – as Mutoid Man. Described by Eugene Jarvis as a Russian nesting doll, Mutoid was a formidable adversary and a real slog to conquer. Towering over the player-character, this intimidating and formidable half man, half tank would have to be taken down piece by piece. Thanks to the stunning artwork and animation work by John Tobias, which allowed context sensitive parts and sprites to degrade before your eyes, as hard as this fight was it was always incredible to watch.

How to beat it: Use the grenade launcher and rockets and pick off the two gunners stationed on either side of his tracks, then focus all your fire on his arms until they're destroyed. Then take out the head.



Goro

From: *Mortal Kombat*

Aliases: Shokan Prince Goro

Shang Tsung was a bit of a lame final boss on account of him lazily mimicking the moves and fighting styles of the other fighters in the game. Sub-boss Goro though, was a memorable adversary – a scary, intimidating half-man, half-dragon you didn't want to get anywhere near during the battle. If you did then you'd be grabbed by one his four arms, and treated the same way a ragdoll is by a bored, angry toddler. With your fighter's torso used as a bongo drum, stamped on and thrown across the screen like a piece of trash, you could imagine what it must've been like for Luke Skywalker when he was pitted against the Rancor in *Return Of The Jedi*. In 1993, Goro scooped the award for best villain by *Nintendo Power*, and, also Hottest Gaming Hunk by *EGM*. 1993 must've been one ugly year for game character design, that's all we can say.

How to beat it: The key to defeating Goro is to keep your distance. Use any attack that allows you to do this – flying kicks are good, as are fireballs if your fighter can throw them. And if you do get stuck in, strike and then get straight back out again.

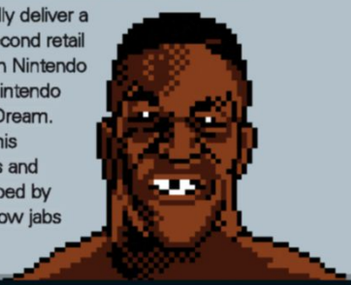
Mike Tyson

From: *Mike Tyson's Punch-Out!!*

Aliases: Iron Mike, Kid Dynamite, The Baddest Man On The Planet

With the exception of boxing games, few videogames let you punch a celebrity. Nintendo's loose coin-op conversion of its twitch arcade boxing sim, saw Iron Mike guest star as Little Mac's final opponent in the game. Capable of delivering uppercuts that floored Mac in one hit, players had little wiggle room for error and had to basically deliver a neigh-on perfect fight. Mike Tyson was omitted from the second retail release of *Punch-Out!!* after his three year likeness deal with Nintendo (for which he was reputedly paid just $50,000 for) ended. Nintendo then replaced him with the far less imposing sounding Mr. Dream.

How to beat it: Tyson will flash before launching one of his devastating down-in-one uppercuts, so look out for the cues and dodge accordingly. Tyson's jab flurries can actually be absorbed by Little Mac, so use these moments to earn stars by landing low jabs to his gut.



Sinistar

From: *Sinistar*

"I am Sinister! Beware coward! Run, run, run! I hunger! Rarghhhhhh!!!!" These words were enough to strike panic into the belly of many gamers back in the Eighties. Sinistar was an unsettling, screaming, taunting spaceship that would harass and torment gamers in this classic multi-directional shooter by Williams Electronics. As Sinistar was constructed before your eyes, so the gameplay became a frantic race to blast the asteroids, collect the crystals and use them to create enough Sinibombs to shut the shrieking skull up before it ate you.

How to beat it: Time is of the essence in this battle. As worker ships race to assemble Sinistar at the start of the stage, use this time to mine the asteroids, create Sinibombs and wage an early attack.

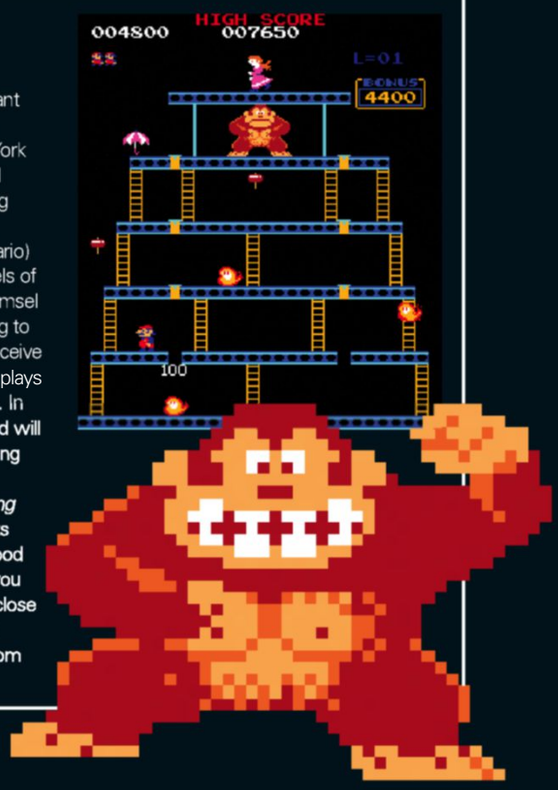
Donkey Kong

From: *Donkey Kong*

Aliases: Cranky Kong

Though he has since changed his ways, Nintendo's giant ape is notable for being Mario's first ever antagonist – though investigations into the Donkey Kong Vs. New York case of 1981 would reveal that the aggressive ape had been mistreated by his moustachioed master, providing some explanation as to why he went on a girlfriend kidnapping rampage. Playing the role of Jumpman (Mario) your mission was to chase the narked ape up four levels of a construction site, and finally rescue his distressed damsel by pulling away the pegs that supported the scaffolding to cause the ape to smash painfully on the ground and receive some nasty head trauma. Like *Sinistar*, DK's presence plays a notable part in the design of the game he appears in. In each of *Donkey Kong's* stages DK is always visible, and will often interact with the levels – lobbing barrels, or dancing around on the top platform of the 'Pie Factory' stage.

How to beat it: The true final screen in *Donkey Kong* is 'Rivets', which sees Mario trying to remove the rivets to cause the level to fall and Donkey Kong with it. A good attack is to clear the bottom ones first, as this leaves you clearing the last few with a handy hammer power-up close by. Bash the chasing flames to create some breathing space and then laugh maniacally as they regenerate from the bottom of the screen.



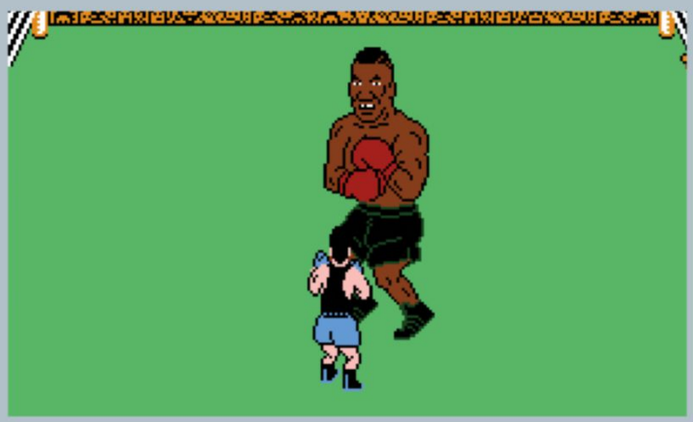
Sephiroth

From: *Final Fantasy VII*

Aliases: The Legendary Soldier, The Man In The Black Cape

Some of the most iconic villains in history have turned bad due to something tragic in their past – Darth Vader, Big Boss, Lots-o' from *Toy Story 3* and Sephiroth. Sephiroth was a coveted solider of Shinra's Soldier program, but turned to the dark side after learning the truth about his past. After discovering he's a product of experiments conducted by Shinra's Soldier division, he turns against the company, destroys Nibelheim village and sets off to wreak revenge on the planet, justifying his actions as a way to cleanse corruption in the world. However, one very famous callous act in *FFVII* would shatter any empathy you might have felt for him as a result of the revelation. Both a highly skilled soldier, and trained in the arts of magic, Sephiroth is a formidable opponent, and the most iconic villain in the revered RPG franchise.

How to beat it: Sephiroth has three different forms, so defeating him is a bit of a slog. To make life easier, get yourself to a good level (99), and use Bahamut Zero, 4X-Cut or Knights Of The Round. All are pretty effective against him.

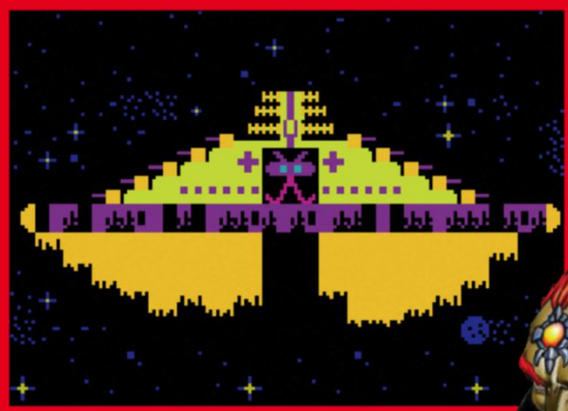


Mothership

From: *Phoenix*

Famous for being the first videogame boss to be presented to gamers as a separate challenge from the main game, the mothership from Amstar Electronics' *Phoenix* is an iconic and influential baddie. Helping *Phoenix* stand apart from many of the other *Space Invaders*-inspired shooters that saw release at the time, this boss left a lasting impression on gamers thanks to being both huge and colourful. Filling a third of the screen, players had to whittle away the ship's hull and shield in order to create an opening for a single bullet to travel skywards and into the head of the alien piloting the ship. A tense and epic space battle, similar boss-levels would later be seen in popular shooters such as *Star Castle*, *Yars' Revenge* and *R-Type*.

How to beat it: A good trick is to first clear a path through the hull, directly underneath the alien, and then direct your fire to one of the edges of the mothership (where the hull is at its shallowest) to pick holes in its scrolling shield. Once you've created a large enough opening, send a bullet up the centre of the hull to kill the alien and destroy the ship.



Ganon

From: *The Legend Of Zelda*

Aliases: Ganondorf, King Of Darkness

The despicable sorcerer and thief who seeks to use the power of the Triforce to rule Hyrule is perhaps Nintendo's darkest ever villain. This half man, half boar is armed with the Triforce of Power, and believes himself to be indestructible and God-like in power, although this is constantly disproven by Link's skill time and time again. Ganon first appeared as protagonist in *The Legend Of Zelda*, where he took the form of a blue pig that could make himself invisible. Later games would expand his back story, and *Ocarina Of Time* would finally unveil the villain's devious human side. Swearing allegiance to the king of Hyrule, upon gaining his trust Ganondorf (his human name) turns against him and usurps the sovereign – forcing princess Zelda to call upon Link for help. The game ends with an epic clash with Ganon at the top of his tower. There the boss falls at Link's feet, and the tower begins to collapse. As Link and Zelda escape, from the dust and rubble emerges Ganon in his powerful beast form. He is also known for not making major appearances in spin-off and portable *Zelda* games, choosing to be quite picky about when he graces us with his evil presence.

How to beat it: Though a tough adversary, Ganon does have a couple of weaknesses that the player should always exploit. He's susceptible to light arrows, and really hates being poked with the Master Sword.

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A SMALL HISTORY OF... Micro Machines SCALE MINIATURES

» Celebrating the success of *Micro Machines* on the Mega Drive.

Micro Machines was one of the best set of multiplayer racing games ever made. David Crookes brings us up to speed with the franchise as he attempts to squeeze tiny details out of Codemasters co-founder David Darling and key MM developer Andrew Graham

A Codemasters game from the early days tended to feature an instance of the word 'simulator', a glowing review on the back that sometimes came from the pen of the company's founders David and Richard Darling and a cheap price tag that perhaps lowered the expectations of young gamers but, at the same time, made for more cordial relations with their cash-strapped parents.

But while the budget market was all well and good for the first few years of the Codies' life, a time had come when the attention had to shift upwards. And so it was that in 1990, four years after the firm had been created, the Darlings were at the Consumer Electronics Show in Las Vegas having been struck by the popularity of one console in particular. "It was the year that the NES was really taking off and as we went around America, we saw that even gas stations were selling Nintendo cartridges," David recalls. "We saw this console taking off as a phenomenon and so we decided that we needed to make games for that machine. It was becoming a worldwide success."

» Codemasters' co-founder David Darling now works at Kwalee with Andrew Graham.

Nintendo snubbed them, however. The only way Codemasters was going to get its NES games to market was to become an unlicensed developer. The Darlings already had an unofficial in-house dev kit put together by Ted Carron and they had, in Andrew Graham, a programmer who could code NES games (he had ported *Treasure Island Dizzy* to the console). What they didn't have was confirmation that Nintendo wouldn't try to sue the pants of them so they went to their lawyers.

"We'd never needed a licence to create games on home computers so we figured there must be a technical way to produce unlicensed games for the NES," says David. "We studied all the legal implications and worked out a way around their patents."

A group of programmers were assembled in a Portakabin in the grounds of Codemasters' Warwickshire base to work on cracking a new market. Andrew began to develop a racing game, which impressed the Darlings. "I knew he wanted to produce an original game and he likes racing games so he prototyped a racing game for a month," recalls David. ▶

"Every time I used to go in the Portakabin he'd be jumping cars over sand dunes. The prototype name for the game was *California Buggy Boys*."

While Andrew worked on his new game, Codemasters was in negotiations with Lewis Galoob Toys. Although the intention was to sell Galoob Codies' Game Genie cheat system ("Lewis gave the Game Genie to his kids and they thought it was the most amazing thing to be able to get Mario to be able to jump off the top of the screen," says David), in the midst of negotiations, Lewis turned to David and implored him to make a game based on *Micro Machines* given that his company was the toys' official manufacturer. "He said we needed to work with them on *Micro Machines* because they made more cars than Detroit," says David, fond of the memory. "We agreed and decided to put the licence together with Andrew's game . That's how the *Micro Machines* game came about."

While *California Buggy Boys* formed the basis of what the top down racer *Micro Machines* was going to be, some tweaks were needed. The team wanted players to feel as if they were steering the small toys around everyday settings. So gamers would manoeuvre around eggs on a breakfast table or dart across a garden. They'd drive at top speed around workbenches. The game didn't need the danger of open real roads. It just needed everyday life as players avoided plug holes and drills or tried to pull off a right angle on a pool table.

"Thinking of new environments was sometimes harder than you'd think," Andrew says. "Once we had done the obvious ones like desks and kitchen tables, it became hard to think of convincing locations which had the right combination of empty flat surfaces and interesting obstacles."

» *Micro Machines* made its debut on the NES. More formats soon followed.

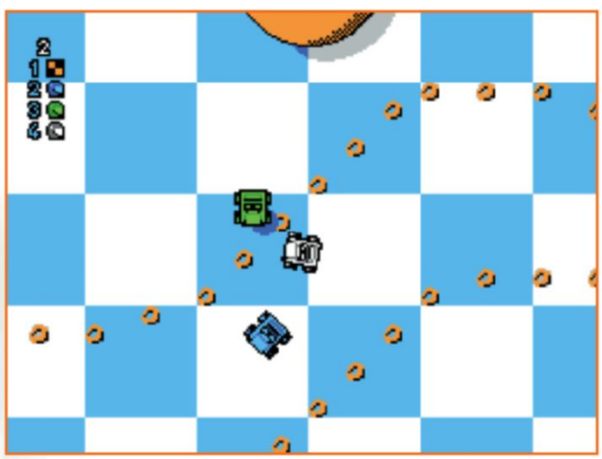
Andrew was 20 years old when he began to work on *Micro Machines*. Paul Perrot was the graphics artist who converted *California Buggy Boys* into the new game using Deluxe Paint and a cross compiler which ran on a PC. Eight-by-eight character blocks were used and there were 256 maximum per level. The AI consisted of invisible arrows which pointed in the direction the vehicles should move. If the AI cars became lost, they would be instructed to follow the arrows back to the track.

"We tried to keep the tracks short," says Andrew. "It is often the shortest tracks that are the best fun. If you've got a large group of people playing then it gives everyone the chance to learn the track within the space of a single race. In order to get familiar with the longer tracks you need to play them a few times, and its unlikely that you'll be able to get a group of players together where everyone has the same level of familiarity with those long tracks."

By this time, Codemasters was moving well away from the budget end of the market but it was also experiencing larger costs. "When we started making games on the Sinclair Spectrum they were on cassette tape and we were selling them for £1.99," says David. "They only cost maybe 22p to make the tape. When we started doing games on the Mega Drive and Nintendo consoles, the cartridges were costing about £8 or £10 to manufacture so they had to be sold to the retailers at maybe £20 and then retail for £39.99 because the retailers take about a 50 per cent margin. Doing games on Nintendo meant you had to do full price."

"Thinking of new environments was sometimes harder than you'd think"

ANDREW GRAHAM



» [NES] Being able to race around familiar locations was a huge part of *Micro Machines'* charm.

» [Mega Drive] The pool table became a firm favourite, appearing in numerous later sequels.

Still, they were confident they were going down the right path and their hunch was confirmed when the game was finished and reviewers played it. The reception was so good that work soon began on a sequel. That came in 1994 with the release of *Micro Machines 2: Turbo Tournament* on the Mega Drive. It arrived a year later on GameGear and in 1996 on SNES and the PC. The Mega Drive versions is notable as it was released on the J-Cart, a special cartridge that allowed for two control ports. With a pad sharing feature that allowed two players to share a joypad, the game could have up to eight simultaneous players, a rarity at the time.

Again, the tracks proved difficult. "Tables tended to be best because the edge of the table provided a natural hazard and a sense of peril which just isn't there with levels set on the floor," says Andrew, who didn't work on the second game since he returned to university. "They needed to have enough interest for the scale of the cars, so for example a level set in a school playground wouldn't work because stuff is just too far apart. Also, it was important that the locations could be recognisable from the point of view of the overhead camera."

With the second game, the fast-paced, knockabout nature of gameplay remained just as fresh as the visual elements. It was very rare to be able to win a race purely on driving better than everybody else; victory was also based on shunting, bumping and rear-ending your way to the finish. The momentum of the cars was becoming so well realised that braking suddenly in front of an opponent and transferring all of their speed to your vehicle was becoming possible. A rather advanced game was emerging.

The first *Micro Machines* had allowed for players to choose a youngster to represent them in the game as they carried out their quest to collect cars. The idea had come about because the target audience was American school kids. "We were trying to keep the concept of the game closely based on the toy cars, which were popular in the US at the time. They were tiny, cheap cars, which kids would collect and swap in large numbers," explains Andrew. The concept was carried through to subsequent games and, in *Micro Machines 2*, journalists and distributers were included, among them the presenter of CiTV's *Bad Influence*, Violet Berlin (see box out). It was an idea Codemasters had with other games too. "In *Operation Flashpoint* we put the local MP in the game and then he got in trouble because there was a big campaign by one of the newspapers for government not doing enough against violence in games, so they were blaming him for being in the game," says David.

It was quite the masterstroke, massaging the egos of people important to the future success of the game. Not that it needed much help. "Having eight players playing on four controllers on a multitap, well that was fun," says Andrew. He would have liked to see, however, a selection of cars which appealed to people's collecting instincts.

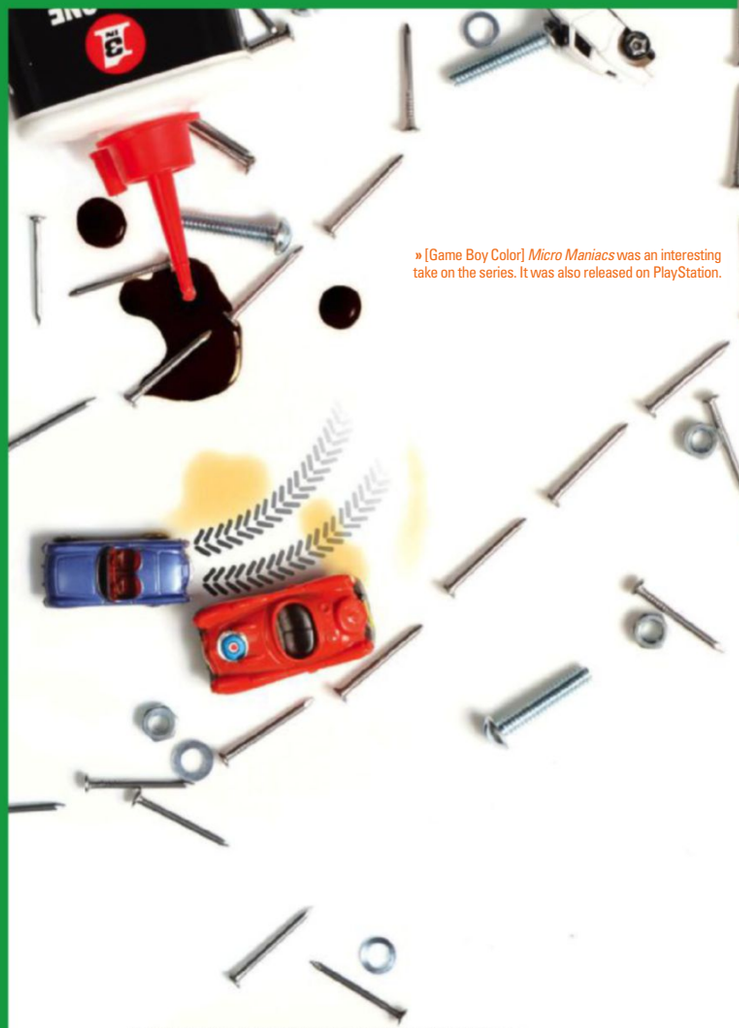
"It was always tempting to allow players to choose cars from their collection prior to the start of a multiplayer game," he says. "This would reward them for playing the game and winning rare cars. Also, they would be challenged to select a vehicle which worked well on each particular track." There was a downside, he adds. "It was pretty obvious that the multiplayer game would only really work where everybody has vehicles which have exactly the same performance, so we had to abandon that idea. This sadly reduced the collecting of cars to more or less a scoring or trophy system."

» David Darling and Andrew Graham enjoy a classic game of *Micro Machines*.

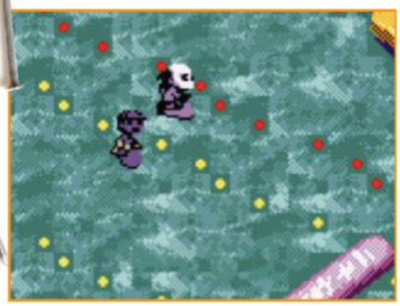
MICRO MACHINES AT THE ARCADES

■ After producing *Micro Machines V3*, the development team at Codemasters was asked to produce an arcade version on Namco's System 12 hardware. This was an arcade system board released at the end of 1996 and it was an upgrade from the PlayStation based System 11. It used surface-mounted ROM chips which meant the boards were unique to each of the games.

The Codemasters team had a huge two-player *Tekken 3* arcade cabinet and they ported *MMv3* to work on it. "We had to make profound changes to the gameplay though, which pretty much killed the fun," says Andrew. "In the normal kind of *Micro Machines* multiplayer gameplay, all of the players could decide to stop racing and leave their cars stationary on the track at any time. This is totally unacceptable in the arcade business. The game must proceed regardless of what the players do, and the game needs to be over in a reasonable time, so that the next punter can feed their money into the machine. So we had to make the multiplayer mode continuous, with players that fell off the back of the screen respawning back into the race after a short delay, with a kind of rolling start."



» [Game Boy Color] *Micro Maniacs* was an interesting take on the series. It also released on PlayStation.



It hasn't stopped him figuring a solution, though. "It occurs to me now that you could still give the player the option to choose a vehicle for the game from a range of identically performing vehicles. Hey ho. Hindsight," he shrugs.

Micro Machines 2 was one of those situations where a classic game was much improved. As well as the multiplayer features, there was a new league mode. The game also boasted more vehicles and terrain, while sprucing up the graphics and sound was also possible. "The machines were getting more powerful and we were making games with more features, higher quality graphics and more levels," says David. "But it cost a lot more to develop games to the quality standards that we wanted to."

In May 1995, a new version of the second game was released in Europe, Australia and New Zealand. *Micro Machines Turbo Tournament '96* was exclusive to the Sega Mega Drive and it came with updated tracks and the track construction kit that had been included in the PC version of *Micro Machines 2*. The physics were slightly different depending on the vehicle too.

"The Mega Drive version was being developed by Supersonic Software outside of Codemasters, but close by," says programmer and artist Ashley Routledge. "Overall the different teams didn't have much to do with each other. I think each team had been chosen for their respective strengths and we were really given the freedom to do what we wanted with the game, within reason. I remember the Mega Drive team had tightened up the handling, giving a more 'on rails' grippy feel."

The next game – again only for the Mega Drive and only in Europe, Australia and New Zealand – was *Micro Machines Military*. It had brand new tracks and military vehicles together with weapons to attack opponents. "Were weapons a good thing or not?" questions Andrew. "Some worked better than others." He said it had proved very tempting to add weapons and power-ups but it was important that these were chosen so that they wouldn't break the multiplayer mode.

Tanks, jeeps and boats armed with guns could blast the opposition out of the running. It wasn't an easy game, however. To achieve a good spot you had to be nigh on perfect. Even trying the Time Trial Challenge was tough, with frustrating time limits. There were, however, some great touches, among them Battle Arena which pitted you in a small area and had you trying to prevent enemy fire from knocking you off the edges. But it was, to be honest, too easy, even in the Pro versions of the games.

But these games were mere diversions when compared to what was branded the third game, *Micro Machines V3*. This was a PlayStation game and it not only propelled the series into a new era but into 3D too. *MMv3* included hidden weaponry which could be added to the vehicles. Opponents could be sent crashing to their doom with forcefields, fireballs, or a hammer delivering earthquake-like blows. A grabber claw snatched an opponent's vehicle from the track and chucked it to the back of the race.

"I think in *MMv3* we had an option to turn off the weapons, for those purists who preferred to play without them but I hope that most people enjoyed them," says Andrew, who had been keen to make his sequel and was given control of this game. "I loved the mallets in *MMv3*, and I remember when we first put them into the game, that it was obvious how much fun it was going to be."

Less fun for the developers were the 'kids' included in the third outing proper. Spider, Cherry, Joel, Walter et al were back but they were supposed to be living cartoon characters that moved with individual flair and emotions. They could also talk. They had to be motion-captured at a farm in Oxfordshire and Andrew would go as far as to say he hated the experience. "In *MMv3* we made the mistake of trying to take them to the next level," he says. "We headed off down to a studio on a farm where we recorded and motion captured actors on what was at the time the latest gear, and then pre-rendered the animations on Silicon Graphics workstations. Sadly, the result was ghoulish, irritating and unwieldy and, worst of all, it got in the way of the gameplay, which should have been quick and immediate."

The development team for *MMv3* had been one of the first to receive PlayStation

GUEST APPEARANCES

■ The most high profile person to appear in the *Micro Machines* games was Violet Berlin who appeared in the second game and subsequent sequels. PR man Richard Eddy at Codemasters had called the presenter of CiTV's *Bad Influence* to ask if she would be a character in the new game.

"I would never have said yes if I thought it would be a lousy game, but I loved the original *Micro Machines* and had a good feeling about the sequel," she says. Agreeing only on condition that she be the fastest computer-controlled character ("I didn't want to be the one bobbling along at the back"), she was told it wouldn't be possible because Spider had to be speediest. So Violet, they said, could be the second fastest.

"I agreed and had to send off a photo for their artists to copy," Violet recalls. "When I told the producer at *Bad Influence*, he got me to do it on the show. We may have been the first to reveal the game. We had a laugh with how my character reacts differently to winning and losing. Seeing myself in the game was awesome. Nowadays it's not so unusual to get a scan of your face on an in-game character, but of course back then it was like magic to actually BE in a game. Yes I know it was only a pixelated cartoon, but even so..."

"But the icing on the cake was that the game turned out to be such a laugh in multiplayer – plus the bonus eight-player with the J-Cart version was epic. Me and my mates played it quite a bit, back then, and of course I got to be me."

» [Mega Drive] It wasn't just cars that you got to race in the popular racing game.

» [Mega Drive] *Micro Machines Military* had something of a limited release and didn't reach America.

development kits. Andrew cringes, however, at the way he used it. "Tools and tool development are a major consideration in any modern project, but I'm sorry to say it wasn't quite the same back in the day," he confesses. "Level editors were usually made by the same programmer that did the main game, and they were usually a variation of that main game. This was the case for *Micro Machines 1* and for *MMv3*. Both of the editors were made by me. I cringe to think of what I put the level designers through on *MMv3*."

The level editor ran on a PSX devkit, and was a crude variation of the game code. "I would have liked to have done something that ran on a PC, but that would have been a major project in itself, and facilities for 3D graphics on PCs at the time were primitive," he adds.

With 48 racing circuits, 32 vehicles, Head-to-Head racing, Tournament racing, Single races, Time Trial events and Chase events, the game had the player racing in sports cars, buggies, power boats, trucks, hovercraft and camper-vans around the *Micro Machines* house and its everyday objects. For a game with tiny objects, it was huge. Gamers could scoot up a resting ironing board to a table top, use a cheese wedge as a ramp, or send a vehicle flying into the air thanks to a handy lift from a pop-up toaster (that involved the vehicle bursting into flames).

"We were always keen for the environments to provide more than just obstacles and for there to be some kind of interactivity if possible," says Andrew. "So there was a toaster that threw you out and stuff like that. This became quite elaborate in *Micro Maniacs*, where we had a big enough team to pull it off."

The next game in the series was *Micro Machines 64 Turbo,* which had been released in 1999 for the Nintendo 64. Up to eight people could play simultaneously with one pad splitting into two pieces. One gamer could use the D-pad to steer and the other could use the four buttons. It got around the issue of the N64 allowing just four controllers to be connected.

The 3D, combined with a top down viewpoint of *MMv3* and *MM64T* retained the "look" of *Micro Machines* but enabled it to be visually more in keeping with other games of the time. "[At the end of the Nineties], 3D offered us more possibilities," says Andrew, who added that 2D games, especially on the PlayStation were becoming a bit of a 'special interest' genre of their own. "Really, people wanted to play 3D games at that point in time and by going to 3D we could transition between tables and the floor. We could give more of a sensation of depth and hence peril at places where you could fall to your doom. I had worried that there might be issues with the 'edge of the screen' mechanic when the camera was allowed to move, but I don't think the game was spoiled."

> **"[3D] could give more of a sensation of depth and peril at places where you could fall to your doom"** ANDREW GRAHAM

After *MMv3* and the Nintendo port, the development team had considered going straight into producing *MM4*. This would have been launched on the PlayStation in 2001 (most likely followed by the Game Box Color

» [PlayStation] *Micro Machines V3* was eventually ported to PC.

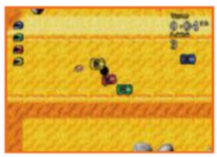
» [Xbox] *Micro Machines* was a reboot of sorts, hiding that this was the eighth game in the series.

TIMELINE

MICRO MACHINES (1991)

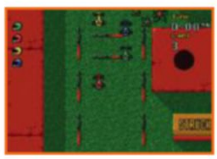
■ "We were intrigued by the idea of micro environments. You could have a car on a breakfast table or on a school desk. It was an interesting, novel concept," says David Darling.

MICRO MACHINES 2: TURBO TOURNAMENT (1994)



■ Different handling techniques and new cars. It could maybe have had more. "When developing *MM1*, we networked consoles together, long before LAN and internet gaming," says Andrew Graham.

MICRO MACHINES TURBO TOURNAMENT '96 (1995)



■ "We were manufacturing our own Mega Drive cartridges with its built-in J-Cart invention," says David. "We made this update for the Mega Drive to add new tracks and a construction kit."

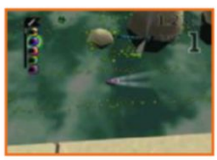
MICRO MACHINES MILITARY (1996)

■ A Mega Drive exclusive which was developed by Supersonic Software. It took away the friendly cars of previous versions and replaced them with harder military vehicles that had tracks to match.

MICRO MACHINES V3 (1997)

■ "We had a *MMv3* tournament in the office," says Andrew. "I'd forgotten about the frontend road network, the cars resetting to the track... I still hate the kids with their pre-race quips."

MICRO MACHINES 64 TURBO (1999)



■ A *MMv3* port for the Nintendo 64. "Andrew Graham wanted to do this sequel because it was originally his game. We wanted it on Nintendo's new console."

MICRO MANIACS (2001)

■ "I really liked the character designs in *Micro Maniacs*," says Andrew. "I was never a fan of the kids in the previous *Micro Machines* games. In retrospect, they could have been dropped earlier."

MICROMACHINES (2002)

■ Infogrames Sheffield (Atari) took over the licence for *MicroMachines*. New characters were introduced and vehicles changed according to the terrain, from army lorries to motorboats.

MICRO MACHINES V4 (2006)

■ With 25 vehicle types and 750 cars to collect or trade, this last game in the series had an arsenal of 25 weapons and power-ups (from a plasma gun to homing missiles) and a track editor.

Toy Story

Other toys that have been made into games

MASTERS OF THE UNIVERSE

■ He-Man starred in his first videogame in 1983 with *Masters Of The Universe: The Power of He-Man* for the Atari 2600 and Intellivision consoles. Coming with a keypad overlay for the latter machine's controller, you fly to the edge of the wild realm of Skeletor and try not to use up your five lives or limited fuel as you duck, dodge and blast fireballs.

THE TRANSFORMERS

■ *Transformers* games began with Ocean's *The Transformers* in 1985 on the C64 and Spectrum, and continued a year later, in *Transformers: The Battle To Save The Earth* on the C64 and *The Transformers: Mystery Of Convoy* on the NES. The latter was exclusive to Japan, as was the 1987 NES game *Transformers: The Headmasters* and the 2003 PS2 title *Transformers*.

CABBAGE PATCH KIDS

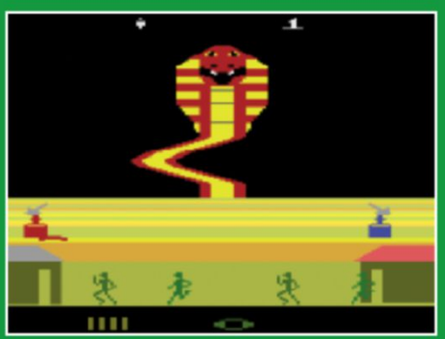
■ Produced for the likes of the ColecoVision console and MSX computer in 1984, the game *Cabbage Patch Kids Adventures In The Park* hooked into the popularity of the brand of dolls that been produced by American art student Xavier Roberts some six years earlier. Massively popular in the Eighties, the game was a static screen platformer by Konami.

CARE BEARS

■ Beginning as a set of greetings cards and spun into a host of cuddly toys, a game was planned for the Atari 2600 in 1983. Before testing could even start, however, the project was cancelled. It was the only attempt at such a game in the Eighties and Nineties and a game based on the toy line didn't come to fruition until as late as 2004 with *Care-a-lot Jamboree*.

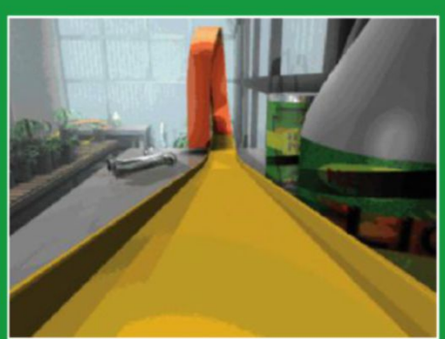
BARBIE

■ In 1984, Commodore 64 gamers were treated to *Barbie*. Players assumed the role of the blonde fashion doll in an airheaded game that consisted of talking to boyfriend Ken who responded with real audio, and trying on various dresses and swimming costumes and driving an open-topped yellow car. Sadly, it was rather dull and very politically incorrect.



G.I. JOE/ACTION FORCE

■ The first *G.I. Joe* videogame was released in 1983 for the Atari 2600 (it was called *Action Force* in Europe). Two years later and the toy was digitised to home computers when it got an outing – complete with vehicle combat – on the Commodore 64 and Apple II. Others followed in the early Nineties, making it a very popular toy on which to base a game.



HOT WHEELS

■ Surprisingly, given how popular *Hot Wheels* was as a brand from the late Sixties onwards, there were no games produced for it at the time. They came later and included games such as *Hot Wheels Stunt Track Driver*, which was released in 1998 for Windows and the Game Boy Color. The racing game let you pit different cars over six tracks around the same house...

M.A.S.K.

■ With an animated series that went with the toys, Gremlin Graphics felt on to a winner when it grabbed the rights to create a series of *M.A.S.K.* games. There were three 2D games in total for the Spectrum, CPC and C64 (two were released for MSX too). The first game let players control the Thunderhawk vehicle and the second and third were horizontal shoot-'em-ups.

GOBOTS

■ Where the Transformers trod, the Gobots followed. This was a toy line produced by Tonka from 1983 to 1987 as a rival. In 1987, Ariolasoft created a game based on the toys for the Commodore 64, Spectrum and Amstrad CPC. *Challenge Of The Gobots* entailed reading an on-screen book first, after which "you should now be au fait with the story," read the instructions.

» An early design sketch of how one of the weapons might have looked.

version in the same year) but instead, the team decided to take out the cars and replace them with running characters (although there were vehicles such as skateboards and even bees!). The end result was *Micro Maniacs*, a 3D, eight-player offering with 12 characters.

"We were considering doing *Micro Machines 4* but it was decided to avoid the substantial royalty payments that were being paid to the manufacturers of the toys," says Andrew. "From a marketing point of view, we just never really considered that we had benefitted from the association with the toys in the specific markets that the game had done well in. It had sold on the strength of its own reputation, rather than being the 'game of the toy'."

By introducing the characters, the developers were able to bring some more personality directly into the game. "I'm not sure the running mechanic worked as well as the cars, though, and my favourite levels were the ones where the characters were driving vehicles of some sort," continues Andrew. "And *Micro Machines* was the brand that people associated with the games we were creating and it was probably a mistake to be messing with it."

Andrew says the game perfected the level editor, though. "We had some very talented programmers working on my dream level editor, which ran under Windows, and gave us the chance to try all kinds of things that would never have been possible otherwise," he says. "It is a pity that we never had the chance to reuse that editor on another project."

A year later, in 2002, the mantle for the series was passed to Infogrames Sheffield. It developed and published an effective reboot of the game which it called *MicroMachines* (the two words stuck together) and released on the Xbox, PlayStation 2 and Game Boy Advance. Website Eurogamer called this a "licensing coup" at the time but the game remained essentially the same at heart. There were drivers, small plastic cars and the familiar everyday landscapes.

Tracks were unlocked from the initial eight and they were of varying difficulties. The graphics were amazing as you'd expect from advanced hardware but the camera position was often strange and the game didn't move far enough forward from *V3*. Despite good reviews, it marked the end of the *Micro Machines* series for four years. When it came back in 2006, developer Supersonic Software and publisher Codemasters were at the helm.

Micro Machines V4 was the true sequel to *V3* and the badging ensured it was seen that way, relegating the 2001 effort to an anomaly of sorts. Launched on the PS2, PSP and PC (with a Nintendo DS version the following year), it looked great despite the low-poly, low texturing visuals and it had some quirks (ten tracks were locked until they were traded with the PSP via a link-up) but the game kept *Micro Machines* at its heart.

As for today, well there is no sign of another *Micro Machines* game and with more than six years having passed, there is perhaps a feeling the franchise has exhausted the possibilities. That said, it continues to draw inspiration. The collapse of Sony Studio Liverpool has prompted some former *WipEout* games designers to create their own development house and their first game, *Table Top Racing*, has more than a whiff of *MM* about it, and we can easily see the series translating to iOS and other digital platforms.

So what would Andrew do today if he had control? "Looking back, the collision resolution was crude on the NES version," he says. "It was much better on the PlayStation and it used the 2D vector collision resolution code from *Psycho Pinball*, a pinball game I did for the Mega Drive. *Micro Maniacs* used full 3D BSP volumes to allow running over objects. But if I was doing another *MM* game today it would certainly use an off-the-shelf physics engine, and a huge amount of complicated development work could be bypassed."

As for David, he is more than proud of the series. "The games are some of the best multiplayer games ever," he says, perhaps trying to get another quoted slot on a box. "It's been in the top 100 best games and things like that, and the licence was really popular, so when we put the two things together, it became a massive phenomenon. The first game sold more than five million units, and it went to number one in 27 countries. It had average scores of 93 per cent. It really did a lot of good for Codemasters' reputation."

» [Xbox] *Micro Machines V4* was the last game in the series. Will we ever get to play another?

» [Xbox] The weapons in *Micro Machines V4* were far wackier than past power-ups.

Future Classic

Modern games you'll still be playing in years to come

INFO

- **Featured System:** PlayStation 2
- **Year:** 2007
- **Publisher:** Sony
- **Developer:** Level-5/SCEJ
- **Key People:** Akiro Hino (director), Tomohito Nishiura (composer), Koji Hori (scenario writer)

GO DEEPER

- **The robot character Steve's name is a reference to *Dark Chronicle*, where your droid/walker-thing was also called Steve.**
- **A second *Rogue Galaxy* was dependent on strong US sales of the game. Sadly, it wasn't to be, thanks to the game's late release date.**

30. ROGUE GALAXY

From the cult favourite creators of the Dark Cloud games, Rogue Galaxy was a terrifically complex sci-fi RPG that appeared far beyond the PS2's sell-by date...

THE BACKGROUND

Well-versed in making action RPGs after creating the two *Dark Cloud* instalments, the major challenges that faced Level-5 with the development of Rogue Galaxy were creating the vast world and introducing a party-based combat system. The scale of the setting is intimidating compared to the *Dark Cloud* titles, taking place across multiple planets in sometimes massive locales – despite the technical superiority of its previous games, such as *Dragon Quest VIII*, *Rogue Galaxy*'s mechanics were more demanding, and the choice to develop a sci-fi universe was a first for Level-5.

The Fukuoka-based studio was wary of the clichéd, hard sci-fi settings with dull colours, present in many modern videogames, so it decided to present *Rogue Galaxy* in the image of Level-5's past titles, combining science fiction with fantasy to create something that felt new to players while being instantly recognisable to the developer's cult fanbase. Level-5's Akihiro Hino described some elements of *Rogue Galaxy* as a 'parody' of sci-fi in an interview, deliberately echoing blockbuster films in its tone, with main character Jaster meant to be an everyman, Luke Skywalker-type hero.

The RPG also reflects Hino's desire to make 'amusement park'-like design – while contemporaries were becoming streamlined and simplified, *Rogue Galaxy*'s in-depth character management was deliberately complex, the idea being that players should have many choices to explore within the mechanics of an RPG like this.

THE GAME

These days, when everyone heralds *Skyrim* and derides *Final Fantasy*, it seems that the Japanese style of RPG has somewhat fallen off of its creative perch. *Rogue Galaxy*, released here six years ago, doesn't tell that story, merging real-time action combat with the extensive customisation and stunning worlds

Things of note

JRPG Darlings

Rogue Galaxy with *Dragon Quest VIII*, sealed Level-5 the approval of acclaimed filmmakers Studio Ghibli, who it collaborated on with last month's *Ni No Kuni* on PS3.

Layton's Shadow

It's strange to think that Level-5 used to be best known for creating hardcore RPGs, when its *Professor Layton* series is one of the most casual-friendly titles out there.

Director's Cut

For its Japanese re-release, a *Director's Cut* version was released, making improvements to the overall experience and additions, most notably an entirely new planet.

High Seller... In Japan

Rogue Galaxy sold over 400,000 copies in Japan, great for a new IP (especially by today's standards). Accelerated localisation might've helped it achieve the same impact in the west.

The Funny Sidekicks

The most notable *Star Wars* similarity is the use of two odd sidekicks, Simon and Steve, the latter of which is a robot. *Rogue Galaxy* is packed with Lucas-inspired archetypes.

» **[PS2]** Despite critics calling it relatively easy at the time, *Rogue Galaxy* actually requires a lot of levelling-up to conquer.

» **[PS2]** *Rogue Galaxy* plays a little like Square Enix's *Kingdom Hearts*, only there's a lot more strategy to play with.

» **[PS2]** The localisation is actually incredibly well done, even if the story is a bit superfluous.

What the press thought

Play
Score: 90%
"An incredible RPG adventure that rarely gets dull thanks to the characterisation and brilliant fighting system."

Gamespot
Score: 8/10
"Like an anime version of *Star Wars*, this big, lavishly produced action RPG is another good reason not to shelve your PlayStation 2 just yet."

that Level-5 became notable for with the *Dark Cloud* series. This is a progressive action RPG that still feels so impressive today. The mechanics are up to date, the combat is aggressively tactical and the pastiche of different sci-fi influences is passionately presented to the player. As the sub-genre of JRPGs stands still, this ranks as one of the greats, and its ludicrously late release in the PS2's lifecycle led to it being undeservedly overshadowed.

Clearly inspired in some degree by *Skies Of Arcadia* (the obvious comparison point is the Dorgenark, your vessel for travelling the galaxy, which is essentially an *Arcadia*-esque spaceboat) the look of *Rogue Galaxy* marries a whole range of visual references together, while also having lots in common with Level-5's own *Dark Chronicle*. In many ways it feels like the summary of all Japanese RPGs released so far, a progressive action game while also being geographically ambitious.

Rogue Galaxy has you operating four characters at one time, and you can pause the action to dish out commands to each of them in a similar way to *Final Fantasy XII*, meaning that each battle has to be tackled as an overall tactical operation. Each hero is armed with their own character abilities, much like the character-specific attacks in *Chrono Trigger*, and using the strengths of the party in tandem is key to conquering even the lowlier random encounters.

In a neat touch that goes against the curve of traditional JRPGs, the combat and exploration work seamlessly together during these fights, another demonstration of Level-5's forward-thinking philosophies within *Rogue Galaxy*. Behind the scenes, too, you can customise weapons through the malleable Fusion system to give you an edge; there's so much to consider beyond the basic encounters and dungeon crawling.

But the magic of it comes in the pace and real-time style of the combat – as responsive as most hack-and-slash games, *Rogue Galaxy* is actually great fun to play, and functions beautifully as an action experience as players hunt out the weak spots of foes and choose the best ways to use the surrounding environments against them. The elements by themselves are familiar, but the way they all work together blends different genres in sound fashion.

The story's a pretty straightforward *Star Wars* analogue with heavy anime influences, but the worlds themselves are extraordinary, filled with the kind of creature designs that offer players a cohesive sci-fi universe. It's this approach to world-building we wish we could see more of modern videogames – but as a one-off, *Rogue Galaxy* stands out when it comes to the composition of its fictional backdrop on top of everything else.

Why it's a future classic

Rogue Galaxy is a time-eating JRPG that holds up thanks to its future-proofed design ideas, while the cel-shaded visuals reiterate the importance of talented artists over powerful hardware. Turn-based RPGs are considered dinosaurs by today's standards; Level-5 strived to create something that could stand up to real-time Western RPGs and succeeded admirably, offering a combat system that gives players the same level of party micromanagement that makes the best of those games so engrossing.

At the same time, however, it feels like a natural successor to the equally excellent *Dark Chronicle*, while also exploring an entirely new direction in the details of its design – Level-5 therefore ended up with a riskily multi-faceted RPG that had the capacity to please a wide range of players, yet poor timing meant that it only found a fraction of its potential audience. If you can find it, it's well worth picking up today to see what you missed.

CONVERSION KINGS!

As coin-op conversions become a rare sight, Retro Gamer looks back at the fading art of bringing the arcade experience home, and speaks to several developers to get a better understanding of what the conversion process was like in the early days of gaming

If asked to write down a list of things we've seen less of this console generation then arcade conversions would certainly be one. There have of course been coin-op conversions, some pretty goods ones, in fact. The Wii received solid ports of *Ghost Squad* and *Gunblade NY* and *LA Machineguns* (released as a double pack), the PS3 got *Deadstorm Pirates* and *Time Crisis 4,* and both PS3 and Xbox 360 got the superb *Tekken Tag Tournament 2* – there are also a few *King Of Fighters* titles and Cave shooters to add to that list too.

In the Eighties, though, you couldn't move for the things. Coin-op conversions have been gradually disappearing over the years, currently kept alive by a proportion of Japanese gamers who seem unwilling to let gaming on vend go. But as even this market is said to be experiencing a downturn in the midst of a troubled economy, is it plausible that this or the next console generation could potentially see the end of the coin-op conversion – is it finally about to run out of credits?

Rewind 30 years and the videogame landscape was a very different place. Bars, bowling alleys and amusement arcades were the birthing room for the most popular videogames, and early home consoles sold by allowing consumers to experience these games in the comfort of their living rooms. Following the tall wave of *Pong*-dedicated consoles that appeared in the Seventies, and the home conversions of *Tank* (converted as part of the VCS pack-in game *Combat*) and *Breakout* in 1978 that followed, the Atari 2600 conversion of *Space Invaders* in 1980 would become the first licensed conversion of a popular arcade game.

Cited by many writers as the first 'killer app' for the Atari 2600, *Space Invaders* helped change the fortunes of Atari's then three-year-old console. Atari became the first company to port the popular shooter and many people rushed out and

» [C64] Domark released a number of Atari coin-op conversions, including *Hard Drivin'* and *Badlands*.

▶ bought its console for that reason. Indeed, when Atari's *Space Invaders* port was released, the company's profits rocketed from six million dollars in 1979 to eighty million in 1980. And though this one conversion wasn't solely responsible for that staggering jump – for one thing, *Asteroids*, *Battlezone* and *Missile Command*, which were all released into arcades in 1980, had their part to play – it did give the 2600 the crucial push it needed to start securing its place beneath millions of televisions across North America.

After the success of 2600 *Space Invaders*, Atari continued releasing coin-op ports for its console, some good (*Missile Command*), some not so good (*Pac-Man, Defender*), but most sold well. In fact, Atari's infamous 2600 version of Namco's arcade smash *Pac-Man* became one of the best-selling games on the machine, with seven million copies sold. Arcade conversions were big business and had a huge presence, with 8-bit computers such as the Commodore 64, ZX Spectrum and Amstrad CPC receiving the lion's share. The bread and butter of the British games industry, these ambitious projects would see developers trying to squeeze versions of popular games running on expensive state-of-the-art hardware into very limited domestic hardware by comparison. The majority thus demonstrated some impressive feats of programming ingenuity, as exampled by Amstrad managing a very credible version of Taito's *Chase H.Q.*, and on the ZX Spectrum a smooth, accurate rendition of Irem's classic blaster *R-Type*. However, for every good conversion that saw release there were a few that fell short of the mark – *OutRun* on the CPC, *Kung-Fu Master* on ZX Spectrum, and the infamous *Hard Drivin'* on C64 to name but a few.

"There was precious little time or inclination for any planning in those days!"
SIMON BUTLER

Ocean Software was one of the most prolific producers of coin-op conversions during the Eighties, licensing and releasing a large number – many under its Imagine label. Given that Ocean was better known for creating games based on movie licences, how important were coin-op conversions for Ocean and how much did they contribute to its business?

"Huge! Many of the coin-op conversions made good money," Gary Bracey, Ocean's software manager, explains. "But there were a number of real blockbusters which contributed enormously – *WEC LeMans*, *Operation Wolf, Arkanoid, Green Beret*, etc." So how were relationships and deals struck with coin-op manufactures back then? "In the early days we would proactively seek out coin-op titles that we wanted to convert or publish (obviously the 'big' ones)," Gary answers. "However, as Ocean's success and reputation grew and our relationships with the manufacturers blossomed then increasingly we were approached directly by them and as a result procured a number of lesser-known games such as *Terra Cresta* and *Slapfight*, which were great games."

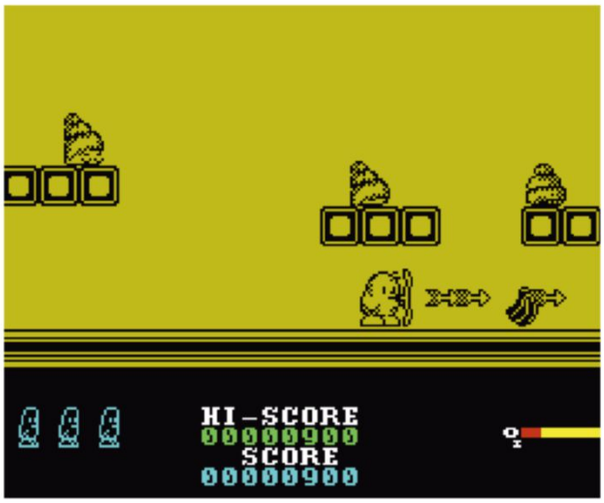
Considering the challenges of trying to get an arcade game running on limited 8-bit hardware, you would probably expect the coders and artists behind coin-op conversions to have sat down and form a plan of attack before making a start… or, perhaps not.

"Planning? What's that?" Gary smiles. "We never received any source materials from the publishers and so the team would have a good look at the game then figure out how long it would take to do the code, graphics and audio. That was the 'planning'. As soon as a coin-op licence was procured we would get a Jamma board and our engineer would install it in the development offices so everyone could have a good play and get the right feel. Authenticity was very important and, despite the significant graphical limitations of the target formats, I think we maximised the quality and faithfulness of the original."

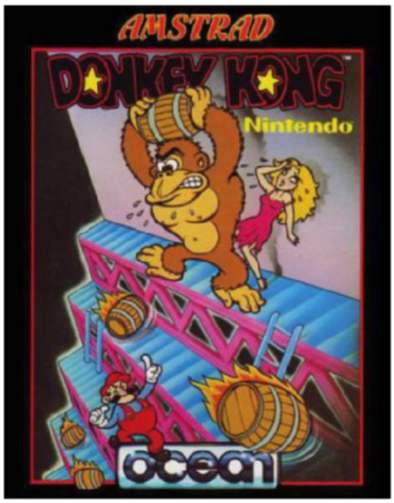
James Higgins worked on the Amstrad conversions of *Combat School, Arkanoid 2* and *Bad Dudes vs DragonNinja* at Ocean, and remembers how, as Gary says, often the planning was in the playing.

"The planning was generally limited to playing the game through and recording it so you could look at it later. Then it was just a case of approximating as best you could the look and feel of the original. Games like *Arkanoid 2* were much easier to recreate 'closely' than multi-screen scrolling affairs, but we did what we could," James says.

It was a similar story for the artists too. "To be brutally honest there was precious little time or inclination for any planning in those days!" Simon Butler, who worked on *Athena*, *Legend Of Kage* and *Combat School,* remembers. "You got a project and you started it. It was pretty much as cut and dried as that. The coder would tell you how many sprites you could have and



» [Spectrum] The Spectrum's lack of colours meant it often couldn't emulate the host arcade game very well. This is *New Zealand Story*.



» Ocean even managed to secure the rights to several Nintendo titles, with conversions of *Mario Bros.* and *Donkey Kong*.

» *Space Invaders* was an important coin-op conversion for the Atari 2600, helping the console turn a crucial corner.

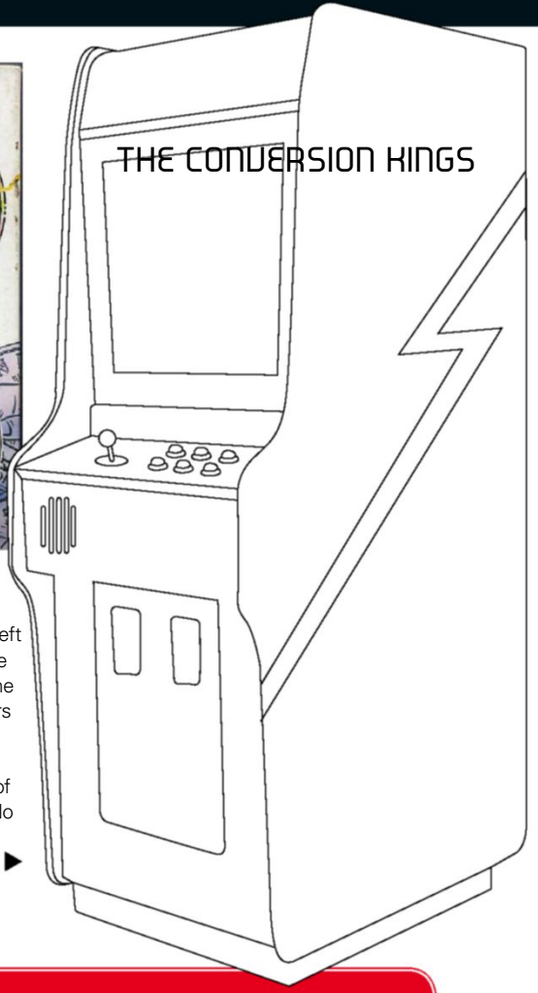
what size and you just got stuck in. It wasn't very pretty how we did things back then but some of it seemed to work and some of it didn't. It was sod's law most of the time."

Though playing coin-ops to gain a deep and intimate knowledge of them was vital, and was how many programmers planned and plotted out their conversions, some would take a more exact approach, extracting the data and assets from the coin-op's EPROMs and then reverse engineering them.

"In the case of *Operation Thunderbolt* for the Amiga and ST, I believe the assets were extracted from the ROMS and converted," graphic artist Stephen Thompson, who worked on the C64 versions of *RoboCop* and *Operation Thunderbolt*, told us. "I remember Robert Hemphill doing a great job of cleaning up, and in a lot of cases, making the sprites and background elements look better. I was quite envious of the 'decadent' 16-colour palettes he could use and the non-fat square pixels." A lack of design assets and input from coin-op manufactures was very common back then, and quickly became par for the course.

» *RoboCop* is an iconic Ocean title, especially as it has ties to both film and coin-ops.

A lot of the time software houses were left to get on with the job, supplied with just the arcade machine for direction. Thus it became common practice at Ocean for programmers to play the games to completion several times over while videoing their progress so they could revert back to specific sections of them later on. "We got nothing technical. No help, just an arcade board. I was rubbish at playing arcade games. So you would find ▶



AMBITIOUS CONVERSIONS

You could argue they were all ambitious, but here are some of the more daring feats of coin-op conversion

DRAGON'S LAIR

■ With glorious visuals by Don Bluth and unique visual-led gameplay that didn't really lend to home formats, it's incredible to think *Dragon's Lair* was recreated on 8-bit computers. Many of them made a brave fist at giving fans a faithful version they could enjoy in their home. The boldest came from the Coleco Adam, which even went so far as to recreate some of the gameplay sequences. Doing a pretty good job for the most part, it's an impressive piece of work.

SPACE HARRIER

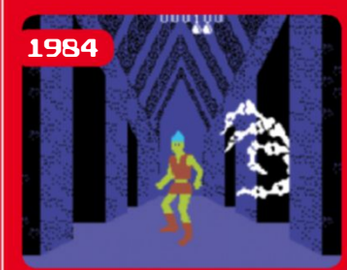
■ Of all of Sega's Super-Scaler arcade games, *Space Harrier* was probably the most ambitious to convert. Not only did it boast incredible graphics and speed, but there was also the concern something would get lost in translation due to there being no hydraulic force feedback chair peripheral on the market at the time. Therefore everything rested on the looks and speed, and as such many machines struggled. The C64 received a solid version though, courtesy of Chris Butler.

HARD DRIVIN'

■ Part arcade racer, part 3D driving simulator, *Hard Drivin'* must have been an imposing beast to try to cage inside 8-bit tech. The best it probably got for *Hard Drivin'* was the Mega Drive and Amiga conversions. The worst conversion award goes to the C64. Horrible monochrome visuals, some of the worst collision detection and controls you'll witness in a finished game, and ear-torturing audio. It still managed to score a generous 20 per cent in *Zzap! 64* magazine.

STREET FIGHTER II

■ That there's a Spectrum 128 conversion of *Street Fighter II* shows just how popular Capcom's brawler was. Though visually impressive, with detailed sprites and backgrounds, you seem to spend more time loading than fighting, and when you are fighting seem to spend a lot of time fighting with the fighting. So there's double the fighting but lots of loading too. *Street Fighter II* was also ported to the C64, with tiny blocky character sprites. It's easily the worse of the two.



▶ the person who could play it best then video the screen while they played it through and use the video as reference," remembers Mark Jones, whose conversion credentials include the Spectrum ports of *Mag Max*, *Gryzor* and *DragonNinja*. "If you got a little bored then you'd go and play the game itself, citing 'I'm doing research, Gary!' when you got told off for not being sat at your desk!"

Sometimes the arcade machines sent in by coin-op manufacturers weren't even set to free play, as is what happened to Steven Collins when working on the C64 port of *Badlands* for Domark. "We had to rip out the coin box and get good at playing the game, so that when required, we could get to later levels in the game to test the game mechanics. This was quite painful. To rip the graphics we had to literally pull the data out of the EPROMs and reverse engineer the data format. Everything else was done from scratch based on playing the game, and coding to that."

» [ZX Spectrum] Despite its relatively modest technology, the ZX Spectrum could deliver a solid coin-op conversion in the right hands.

On a rare occasion though, a programmer would be fortunate to receive the occasional design document. Ste Ruddy, who wrote the C64 conversions of *Bionic Commando*, *Bubble Bobble* and *Ghouls'n Ghosts*, remembers one such instance when working on one of his most acclaimed ports. "For most games we just got an arcade board, a deadline and got on with it," Ste remembers. "The only exception to this for me was *Bubble Bobble*; which did come with a big bundle of documentation. On *Bubble Bobble* we got a level map on custom graph paper showing the graphics, air flow together with baddie and pickup start locations."

John Meegan worked on conversions for 8, 16 and 32-bit machines, and explains how the arrival of better technology within domestic hardware saw the conversion process start to change.

"In the C64 days, you'd look at the game while you were playing it and have a rough guess at how long you thought it would take," John remembers. "The rough guess was always wildly conservative. By the time of PlayStation, games were planned better. However again it was too easy to underestimate the scope of the project. *Darkstalkers* was exceptionally difficult as the source code quantity was massive and

CONVERSION CATASTROPHES

There were many, but here are a few of the more infamous

CHASE H. Q.

■ **Format:** Commodore 64 ■ **Publisher:** Ocean

■ If there is any convincing evidence to suggest that the C64 was behind the pack of its main computer rivals when it came to arcade racers, it's its port of *Chase H.Q.*, which can be summed up as 'nice looking unnecessary border framing a rubbish game?' Slow, ugly and horrible sounding, we're surprised Ocean put it out. Compared to its stunning Speccy and CPC ports, this port looked and felt light years behind them. It's less 'let's go', more 'let's get the hell away from this', Mr. Driver.

BURGERTIME

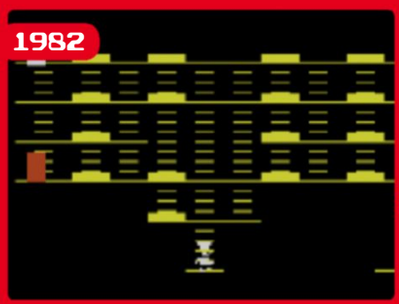
■ **Format:** Atari 2600 ■ **Publisher:** Mattel

■ While *Pac-Man* on the 2600 often gets the brunt of gamers' scorn, there is a coin-op conversion that's worse. Ladies and gentlemen, we present *BurgerTime*. Enemies are blocks of colour (to represent cheese and eggs) and rather than making tasty burgers, it looks like Peter Pepper is running around stacking wooden pallets. Add slow, flicking animation, and a pepper attack that causes the gameplay to pause momentarily, and you have perfect recipe for a disappointing conversion.

PAPERBOY

■ **Format:** BBC Electron ■ **Publisher:** Elite

■ Given the BBC's classroom presence, you'd think it would have done a half-decent job at recreating many a schoolkid's first job. However, *Paperboy* is one of the worst conversions on the computer. Slow gameplay, colourless visuals, lazy level design (houses with gravestones on their front lawn), farty-sounding title screen music which is so bad it makes you appreciate the fact none is played in-game, plus a lovely bloody big border that eats into your already limited playing field.



to make the gameplay the exact same, the code had to be converted line for line. Also, compressing the graphics and audio was a major undertaking too."

So was it more enjoyable for developers converting a coin-op they enjoyed playing, or would the challenge of the process colour their opinion?

"It's infinitely more enjoyable to work on a game you enjoy," John answers, "as it's far easier to play through the game when you're engaged by it. And the more you play it, the more you want to make a version as close to possible to the original. You get the feel for what makes it great."

Some people we spoke to though didn't agree. "It was worse in a lot of cases," feels Stephen Thompson. "With *Operation Thunderbolt* I was in charge of making the pseudo 3D sprite scaling sections. I remember having to animate the scaling using a flick book technique, using a level editor with the page forward/back function. These then had to be cut out and saved next to each other so the char characters could be re-assembled. Very, very hard work, and due to memory restrictions I had hardly any detail to play with. The backgrounds were a little easier to do, as I could make them loop every three frames (the airliner interior level being a good example of this)."

Considering that arcade games often relied on bright, colourful visuals to draw customers in and attract earnings, did developers ever feel more pressure to get their conversions looking faithful over how well they played?

"Certainly with *Rastan Saga* (C64), yes," John says. "To get the ropes to work in any way well, I would have to reserve 32 characters for this reason alone. Then to get the trigger points with enough variety, I would have needed another 32 characters. Then add to that 16 characters for collisions. We already had to pretty much obliterate the main character to work within the eight sprites a line limit, and redo the background graphics so you could see the projectiles. In the end no characters were reserved for the ropes and only 16 for all triggers and collision characters to allow for environments that looked anything like the arcade ones. On *Darkstalkers* we compromised the frame-rate so we could have as many graphical frames as possible. Pretty much 90 per cent of the processing time was taken up just decompressing the character graphics."

» [C64] *Bionic Commando* is another impressive C64 port. Not surprising, as it's by Ste Ruddy.

Ste Ruddy also makes a good point about why capturing the look of a coin-op was so important from a sales and marketing perspective. "It was certainly a consideration (even now screenshots are viewed as important marketing tools)," he says. "But I was never aware of any external pressure relating to art more than anything else. I really just remember trying to do the best we could manage in all departments!"

> **"Back in the 8-bit days, it was playability that was the most important"**
> MARK JONES

But as Mark Jones points out, sometimes the gameplay was often the easier part to adapt. "Back in the 8-bit days, it was playability that was the most important," Mark says. "There was no way *Gryzor* on the Spectrum was going to look like its arcade counterpart. The playability was easier to port across. You just had to do the best you could to make it look like the arcade version given the limitations of the target machine." Though graphics had a crucial role to play, conversions that delivered in all areas would never fail to leave an impression. But equally, those that disappointed are remembered just as vividly.

Indeed, few things were more annoying back then than knowing a better port of a coin-op could be found on a format you didn't own. So did the quality of conversions rest solely at the door of the coder and artist, or were some formats better at handling certain styles of games than others? And if so, might this explain why often you would see ports of varying quality across the likes of the ZX Spectrum, CPC and C64?

"Definitely," John says. "The ZX Spectrum and the Amstrad had ▶

» Sometimes the packaging and loading screens would be more impressive than the conversions themselves.

KUNG-FU MASTER

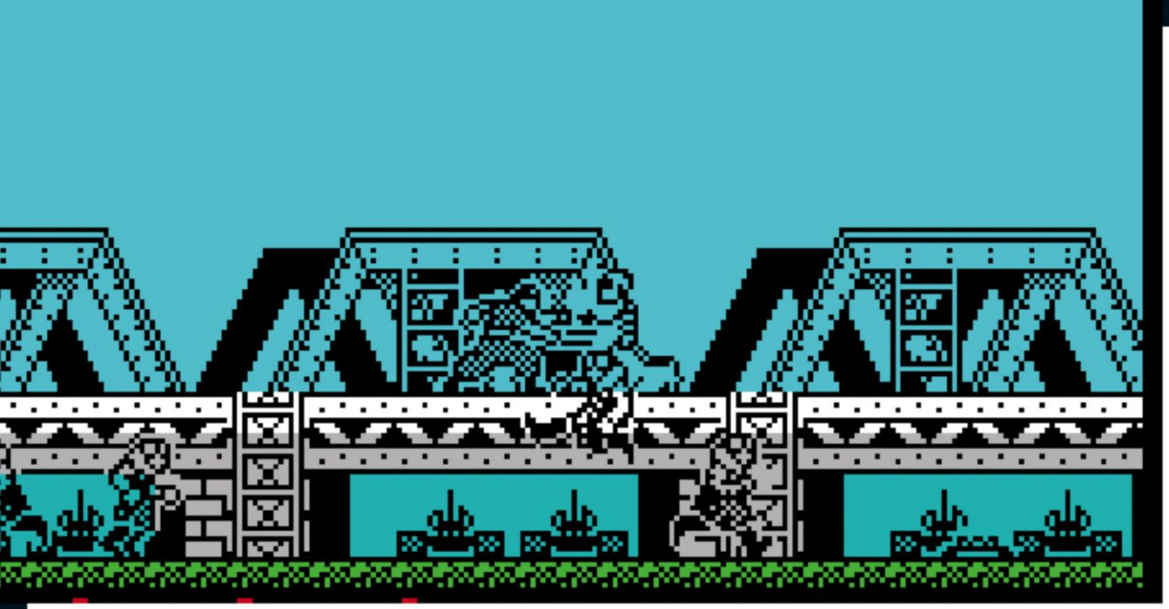
■ **Format:** ZX Spectrum ■ **Publisher:** U.S. Gold

■ A coin-op conversion that makes a much bigger deal about the coin-op's logo than the gameplay, the Speccy port of *Kung-Fu Master* suffers from poorly drawn sprites, headache inducing scrolling, and a set of attack moves that look about as cool as watching your karate hero smell-the-hair-of-his-opponents to death. It's also incredible frustrating, owing to its dubious hit detection and slow gameplay. It's one of the worst conversions on the machine.

BOMB JACK

■ **Format:** Commodore 64 ■ **Publisher:** Elite

■ It turns out size is important for coin-op conversions. Get the sprite-to-everything else ratio wrong and it could be enough to kill your conversion. This is the biggest issue in the C64 port of *Bomb Jack*. Though it could have benefited from a bit more polish (the city background in round 09 looks like you've hit a kill screen) the fact that the sprites were too big and chunky (ironically, something you normally want from a coin-op conversion) made negotiating the stages difficult.



▶ a far superior Z80 processor and a logical bitmap screen layout to do 3D. Whereas the C64 had great hardware scrolling and sprites, making scrolling shoot-'em-up games more responsive."

Paul Hughes worked on the C64 ports of *Mag Max*, *Operation Thunderbolt* and *Combat School* at Ocean, and agrees that the makeup and strengths of the individual formats had a part to play. "Scrolling shoot-'em-ups were a much easier proposition on C64 due to the character mapped screen, hardware scrolling, and multiplexed hardware sprites," explains Paul. "With the Spectrum you had to think right outside of the box to pull something like that off. Of course, games like *Uridium* on Spectrum proved what could be done with some oblique thinking!

"Spectrum was much better when you need to throw around a lot of big sprites – as you were effectively drawing them with the CPU the size limits were a function of how fast your sprite plots were – so, like on *Operation Wolf* on the Spectrum they had much chunkier, wider sprites than the C64 version. On the C64 you had a fixed number of sprites on one horizontal line and then you had to use raster splits to reposition the sprites vertically."

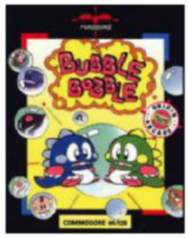
So what are the key things to consider when tackling a coin-op conversion? What makes a good one? "That's a tricky one," Ste answers. "Personally I tried to identify the essence of the arcade game and any signature components to make sure they were implemented as well as possible in the conversion. Different games have different signature components – *Bubble Bobble* has bubbles, *Bionic Commando* the extendable arm, *Ghouls 'n Ghosts* armour and super armour, *Sky Shark* has bullet upgrades – so as well as looking, feeling and, importantly, playing similarly it was essential to capture these stand out features."

Paul feels that capturing the responsive controls and smoothness that players came to expect from coin-ops was also crucial. "The "feel" of the player control and a fast frame rate are key – if the control of the main character feels sluggish then the player will get frustrated and at that point you've fallen at the first hurdle. Getting a good handle on the way the bad guys move and interact with the levels is key to a faithful conversion – going back and watching videos of people playing the game over and over again gives you an insight into what the game logic is 'under the hood'. In general, we didn't get any documents, notes, source code or graphic data for the games we converted, so you pretty much had to figure it out for yourself."

> **"With very limited home hardware, you had to think outside the box"**
> PAUL HUGHES

» Elite Systems secured the rights to two popular run-and-gun titles, with *Ikari Warriors* and *Commando*. Most conversions of these games were good too.

» Even Firebird got in on the action, publishing conversions of games such as *Bubble Bobble* and *Flying Shark*.

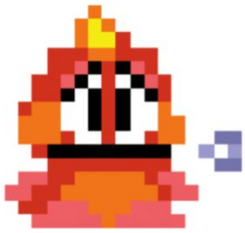


Mike Lamb wrote a large number of popular conversions for the ZX Spectrum, including *Renegade, Arkanoid, Arkanoid: Revenge Of Doh, Combat School, Target: Renegade* and *Wec Le Mans*. He feels a good conversion wasn't just about the things you could squeeze in, but also being resourceful when adapting iconic elements from coin-ops that couldn't be replicated verbatim on home formats.

"In my day, having your basic sprite/scrolling routines working well was important," Mike says. "After that I'd say being prepared to make changes rather than slavishly imitate a system with a much greater capability. For example, we got rid of scrolling in *ZX Renegade* and adapted the control system so it worked with one attack button instead of three."

Relaxed input and involvement by coin-op manufacturers would continue through the whole conversion process. Most programmers and artists were given not only little in the way assets before starting a project, but guidance and feedback during it. But though tough and challenging, coin-op conversions weren't without their rewards. While they didn't allow developers to push themselves much creatively, they did force them to program on hardware shoestrings. Moreover, that a clear template for the design, sprites, and audio already existed also had its appeal.

"Well it's a lot more formulaic in one way. You have a very clear goal to hit," Steven says. "And you have an existing, hopefully fun game to work from, so there's no initial uncertainty about whether the game can be good. The challenge is reproducing that good gameplay as best you can given the limitations of the device."



Of course, another advantage was that you could be sure plenty of people would buy and play your game, so if you did a good job, it was a great way to get noticed within the games industry, both among gamers and your fellow developers. "With very limited home hardware, you had to think outside of the box to achieve what the much more powerful arcade hardware was capable of," Paul explains.

"A classic example was Ste Ruddy's *Bubble Bobble* – the C64 hardware would have barfed once you had six bubbles in a horizontal line with two players (eight sprite limit), so Ste used the hardware sprites for Bub and Bob and the baddies, but all the bubbles were rendered and masked by the CPU into the charset on the fly so he could have loads of non-flickering bubbles. That was a work of art."

As coin-op conversions seem to be going the way of the dinosaurs, are there any practical skills and lessons they teach that could also disappear, and how this might affect future generations of game developers? "Hardware is generally just so capable now and generally very similar. Lots of textures and lots of polygons," James says. "There's less need to understand the low level hardware to get great results. So, in a sense, that is what is missing. There's a whole new generation of programmers and designers that don't understand why it gets slower and slower when they add rigid body components and collision meshes to their scenes in Unity. They'll be scratching their heads wondering why their terrain with six blended textures runs nice on their Mac but then crawls at three to four fps when they deploy to iPhones, say."

But perhaps the battle wages on, it's just migrated to other areas of gaming. "I think conversion and battling with limited hardware is still going strong!" Ste feels. "I've just recently been helping out on converting our *Chimpact* title to Nintendo DS; if you compare the hardware specs of Nintendo DS and iPad 3 you'll find the void is probably wider than C64 to arcade machine. Personally I really enjoyed the challenge of implementing the arcades latest and greatest on limited hardware.

"As you didn't get any design choices that could help you steer the game towards particular hardware support they could force you to be more creative in how you used the hardware you had. Generally they taught you to be careful with the resources you have, planning and tracking there use throughout the lifetime of a project."

Retro Gamer would like to thank everybody who contributed their time and expertise to this article.

CONVERSION CHAMPIONS

The stunning conversions that showed us how it's done

TURBO OUTRUN

Format: Commodore 64

If there is any convincing evidence to suggest that the C64 wasn't behind the pack of its main computer rivals when it came to arcade racers, it's its port of *Turbo OutRun*. While the original game didn't fare too well on the majority of home formats, this conversion, its first sequel, did impress. Wonderful graphics (by *Starquake* creator Steve Crow), silky smooth scrolling and a superb soundtrack made this an essential C64 purchase.

R-TYPE

Format: ZX Spectrum

One of the best looking conversions to ever grace the Spectrum. The machine's day-glo colour pallet look great and the detail hi-res sprites allow the game's H.R. Giger-inspired enemies to look even more pretty and detailed. It's not just the visuals that wow though, as the gameplay is also impressively smooth, the difficulty level spot-on and the audio splendid too. This is necessary Spectrum playing.

BUBBLE BOBBLE

Format: Commodore 64

Taito's classic single-screen platformer fared well on many home platforms, and Ste Ruddy's superb C64 version is widely cited by fans as being one of the best. Lovely looking arcadey visuals, plenty of levels, a splendid co-op mode, and even a secret room to find too – it contained all the essential ingredients that made the coin-op so playable and popular, and thus can be seen as a leading example of how a coin-op conversion should be done.

PANG

Format: Amiga

The Amiga was generally always treated to excellent looking conversions, but ones that didn't quite match up in the playability stakes. This cannot be said about its *Pang* port, however. Developed by the French arm of Ocean, it was a flawless conversion – it runs a teeny bit slower than the coin-op – that, were you to plonk inside a gutted arcade cabinet, would probably struggle to tell apart from the original.

GRYZOR (AKA CONTRA)

Format: Amstrad CPC

The Spectrum and CPC received very good conversions of *Contra*, but the CPC just betters it thanks to its more generous colour pallet. Every level is lovingly restored, and though the action doesn't smooth scroll, it really doesn't mar the experience one bit. This port is also notable for its amusing surprise ending, which *spoiler alert* sees Bill and Lance's alien eradication effort fall flat on its face after killing the final boss causes the planet to explode.

Minority Report

Special Commodore 16 Issue

For those who have asked for more C16 coverage, as well as those who just like finding out about great games for underappreciated and less well-known systems, Rory Milne has compiled this special Minority Report

» [C16] Fending off the chrome labyrinth's relentless robotic inhabitants with your laser pistol.

TUBE RUNNER

■ DEVELOPER: MARK ROGERS ■ YEAR: 1988

■ **You awake, disorientated, with the Tube Master's words ringing in your ears, "Run, Tube Runner! You'll never solve my labyrinth's puzzles in time, so run for your miserable life!" Forcing yourself to your feet, you quickly realise two things: that your metallic cylindrical prison stretches for miles in both directions, and that you're not alone. Someone or something is moving toward you at great speed, and a glint of polished steel confirms your aggressor's robotic nature. The flickering display on your laser pistol reads "LOW", so you run blindly along the murky chrome maze, a little too fast perhaps as you fail to notice the down-pipe before it's too late.**

The fall doesn't hurt as much as the landing, but your pursuer hasn't followed and, better still, you notice a charged ammunition pack lying just feet away. With fresh resolve and your pistol fully loaded, you take the pipe's elevator platform upwards, where your robot opponent mounts another attack, but this time you're ready, and you light up the dimly lit tube as laser melts steel.

Stepping over the smoking debris, you find something. You use your pistol's display to better identify the object; it's a large jewel, and it's come to rest next to a key. A voice thunders over the labyrinth's loudspeaker systems, "One jewel! You expect to escape with just one jewel?" Laughter echoes around the tubular maze. You look at the watch strapped to your wrist, its countdown has reached fifty, fifty what you're not sure, but you do now know that your freedom hinges on

» PETALS OF DOOM

■ DEVELOPER: MICRO PROJECTS ■ YEAR: 1985

■ **A mission to** survey alien plant life goes horribly wrong, leaving you trapped in a series of subterranean chambers where hostile, ravenous creatures devour the otherworldly flowers you sought to study. Dispatching creatures with your lasers and avoiding them using your jetpack drains your power pack's limited energy, but this also allows the planet's underground flora to grow to maturity then absorb the energy barriers blocking the exit to the next chamber. Albeit a simple shooter, the action on offer is impressively slick, speedy, and satisfying. The game also looks great, given the limitations, and its sound effects pay homage to the title's arcade counterparts.

» PROSPECTOR PETE

■ DEVELOPER: DOUG TURNER ■ YEAR: 1986

■ **A prospector, named** Pete, as you might have guessed, sets off to dig underground tunnels in search of gold, minerals and oil. But in a novel gameplay twist, our prospector pal must carry out his excavations in a flooded mine, so where he digs water follows. He must also outrun red-eyed mutants, either that or chuck sticks of dynamite at them. Worst of all, he can't surface until he collects enough treasure, before being sent straight back for more. Though functional, the visuals work well with the considered gameplay. This evolves subtly to give the frantic proceedings a smooth difficulty curve, which stops the game from getting too frustrating.

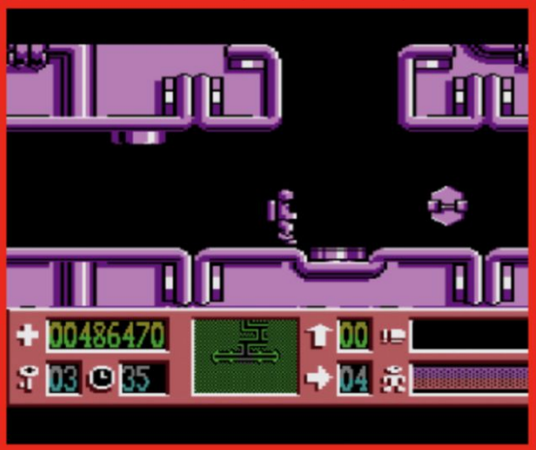
» TYCOON TEX

■ DEVELOPER: ANTHONY J. CLARKE ■ YEAR: 1985

■ **In a strange** future, a cowboy patrols his oil pipeline armed only with his trusty six-shooter. The pipeline spans desert and ice landscapes teeming with alien life forms, jet planes and bouncing bombs. Equally hazardous is the pipeline itself, as falling into its cracks proves fatal. However, jumping a crack makes the oil pressure drop rapidly, and if it hits zero our hero is out of the oil business. The quicker he runs, though, the faster the pressure builds up, meaning it pays not to be a slowpoke. Despite its steep learning curve, *Tycoon Tex* is a pretty good run-'n'-gun, offering decent graphics, smooth animation and a stiff challenge.

» [C16] Against the clock, you leap from an elevator platform to get to a vital key.

» [C16] Out of ammunition and hunted by a robot, you run frantically for the elevator.



» ABOUT THE SYSTEM

- The C16 is one of three related Commodore computers, the others being the business orientated Plus/4 and the rubber-keyed C116.
- The US lifespan of the C16 was less than a year, but it saw more success in Europe.
- An upgraded C16 can run most Plus/4 games.

» [C16] It's taken both of the keys you collected, but one more jewel is yours.

finding jewels. Your defiant battle cry fills the air, "Game on, Tube Master!"

At first glance, *Tube Runner* appears to be a straightforward collect-'em-up set in a series of brightly coloured metallic mazes, but a key mechanic employed by the title radically transforms its gameplay. Although running left and right through the maze works exactly as you would expect, the pipes that lead up and down are governed by the rules of gravity.

So you need to make frequent use of elevator platforms located at the foot of each up-pipe to move up levels, and make time-consuming jumps into down-pipes each time you need to descend. The game's distinctive nature is further enhanced by strictly limiting your energy, time and ammunition, which makes it essential that you constantly search the maze for fresh supplies. The robotic inhabitants of this chrome labyrinth are relentless, and an initial pistol blast only splits them into a group of smaller bots; further blasting is required to dispatch them completely. The time allotted to complete each stage never seems enough, and the frantic search for keys, ammo, energy packs and the jewels needed to complete each level can often result in complete disorientation.

Sparse sound effects add to this tense and claustrophobic atmosphere, and while monochrome, the title's well-defined visuals have a nicely gradated look, which helps gives them the illusion of depth and solidity. It's also worth noting that *Tube Runner* runs at breakneck speed, but this challenge is well worth rising to.

» VIDEO MEANIES

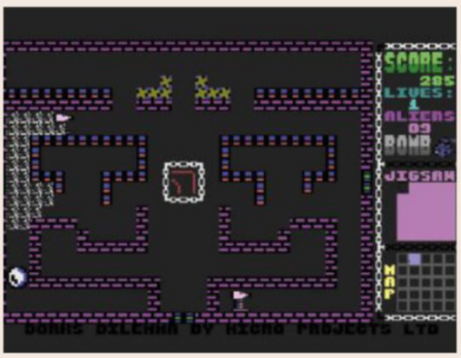
■ DEVELOPER: TONY KELLY ■ YEAR: 1986

■ **Nothing's more annoying** than going to bed having left the TV on, so imagine the frustration of an eccentric Eighties millionaire with a TV and VCR in every room of his huge castle. He wasn't getting to bed until dawn, so he bought a robot to switch off his AV equipment for him! Unfortunately, after dark, ghostly apparitions run riot with the electrics, and their mere touch is enough to fry the metallic helper's circuits. It looks like he's going to have a long night. This combination of devious puzzler and twitch shooter is a winning one, with gameplay and mechanics designed to play to the strengths of the hardware.

» BUBBLE TROUBLE

■ DEVELOPER: KEITH HARVEY ■ YEAR: 1986

■ **It isn't easy** being a bubble floating in a bath. The shampoo and nailbrush are out to burst you, and your only ally is the soap that spawned you. More disturbing still, your one hope of escape lies in cannibalism! Yes, to go up in the world, literally, you must eat enough of your fellow bubbles to increase in size and temporarily float free of your watery nightmare. But be prepared for yet more dangerous baths to come. A confined playfield enhances nicely balanced risk and reward mechanics, resulting in highly addictive gameplay. Meanwhile, chunky pastel sprites and pleasing sounds add polish to a tough but moreish gaming experience.



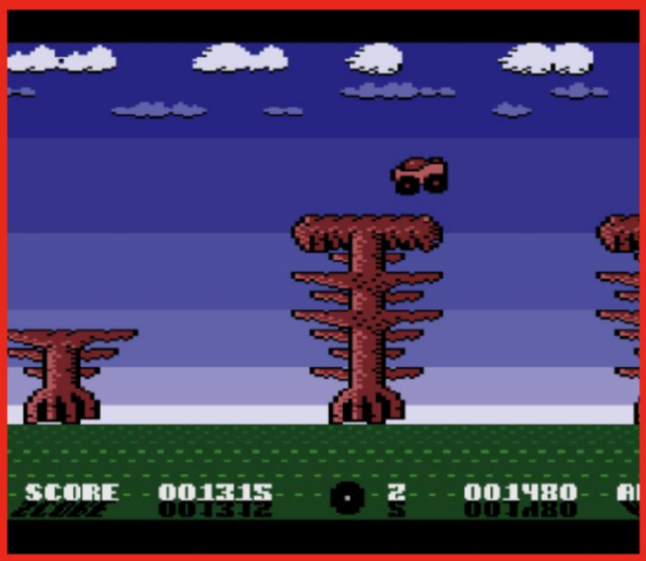
» DORK'S DILEMMA

■ DEVELOPER: ANTHONY J. CLARKE ■ YEAR: 1985

■ **A space traveller** has crash-landed on a planet in a rough part of the galaxy. On regaining consciousness, the intrepid explorer realises his spacecraft has been stripped for parts by local inhabitants. Thankfully, his craft's time bombs have gone unnoticed, so filling a backpack, he follows footprints to the scavengers' underground lair. Entering the first chamber, he sets the timer on a bomb, and makes towards a fiercely guarded piece of his ship. This well presented game emphasises strategy, with a challenge that lies in escaping the blast area of your bomb, which differs between walled and open spaces, while catching as many aliens in the blast as possible.

Minority Report

AUTO ZONE



» [C16] Attempting a pixel perfect leap at just the right speed to land on a pillar.

■ DEVELOPER: KEITH HARVEY ■ YEAR: 1987

■ **Your ship is gracefully orbiting a moon long thought to be dead, but against all odds the craft's scanners have picked up signs of life. Protocol is clear, newly discovered life must be investigated, but the file your ship holds on the nearby moon makes for unpleasant reading.**

Several exploration probes have been sent to its surface, but none have returned. Worse still, the only zone that your craft can land on lies on the opposite hemisphere from where life has been detected, meaning that you'll have to drive the ship's buggy across the moon's most treacherous terrain in order to complete your mission.

Don't let the attractive primary coloured visuals and catchy in-game music lull you into a false sense of security, as even a cursory glance under *Auto Zone*'s bonnet reveals brutally harsh gameplay. You're required to drive your buggy right to left across a series of side-scrolling lunar levels, with the twist being that you aren't allowed to touch down on the surface of the dead moon you're exploring. Instead, you have to jump pillar to pillar and platform to platform, making pixel-perfect leaps while judging just the right speed to be doing each time you take to the air.

These mechanics could have easily produced an experience that got very frustrating very quickly, but actually the game's highly responsive controls leave the player blaming themselves for each and every one of their inevitable and numerous fatalities, as the levels quickly become something of a memory test.

» DINGBAT

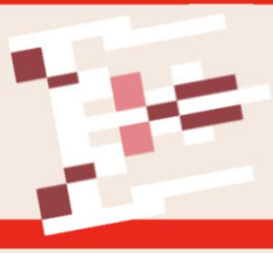
■ DEVELOPER: SHAUN SOUTHERN ■ YEAR: 1988

■ In a "one man against the world" scenario, you strap on your jetpack and laser cannon. Expect the enemy to throw everything at you: battleships, tanks, helicopters, everything in this addictive shoot-'em-up.

» LIBERATOR

■ DEVELOPER: D. R. GAMON ■ YEAR: 1987

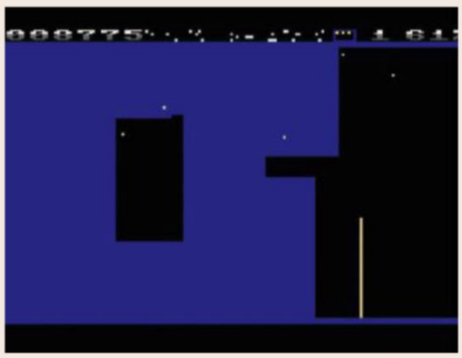
■ No prizes for guessing the inspiration for this one, it has *Uridium* written all over it. But it does compare quite favourably, and demands a fair bit of strategic planning in addition to sharp reflexes.



» OBLIDO

■ DEVELOPER: PROBE SOFTWARE ■ YEAR: 1986

■ **In a land** of abstract shapes and colours, a small droid dutifully follows his coding. His instructions are to shepherd four jumbled sets of nine counters, each a different colour, into four correspondingly coloured safe areas. This task would be simpler if not for the Sinners, geometric shapes that escape from their Sin Bin and fire electricity at the mechanoid at every opportunity they've got. He can fire back, or crush his opponents between coloured counters, but either action uses up valuable time and his task is set against the clock. A quick trigger finger is required for this tough puzzler, but the end result is compulsive gaming.



» ZOLYX

■ DEVELOPER: ZOLTÁN TASS ■ YEAR: 1987

■ **Zolyx fights for** territory in a two-dimensional plane where dots are the dominant life form, claiming land by marking out rectangle areas in his clan colour blue. Zolyx's rivals, who fight under the colour black, send out scouts to stop the brave young dot. One party skirts the four straight edges that border the nation, while another seeks to attack Zolyx each time he attempts to take a section of land. If Zolyx can claim three quarters of the available territory, his authority will be respected. Although the influence of *Qix* over its gameplay is undeniable, replacing the coin-op's graceful adversary with Zolyx's unpredictable dots produces a very different game.

» FINGERS MALONE

■ DEVELOPER: DOUG TURNER ■ YEAR: 1986

■ **It's said that** there's no honour amongst thieves. Take Fingers Malone, for example, he's got wind of where a criminal outfit have been stashing the loot from their recent spate of bank raids, and he plans to, ahem, relieve them of it. This is easier said than done, though, as the bulk of their haul is locked away in a series of safes on the various floors of their hideout and the keys will need to be collected from right under their noses. This colourful platformer is made far from easy due to the confined spaces you must negotiate. Add in dogged adversaries and hard to reach objects and you have a tough but fair collect-'em-up.

TIMESLIP

■ DEVELOPER: HUDSON SOFT ■ YEAR: 1990

■ **For reasons unknown, a despotic leader has used thirty-six mysterious time orbs to knock the three time zones of his rogue planet out of sync, both from each other and the wider universe's timeline.**

The potential consequences are unthinkable, as the destabilisation of the timeline could very well lead to the destruction of the affected world. Behind the scenes, the galaxy's top fighter pilot, sub commander and jetpack marine have been called to a secret briefing by a highly covert intelligence agency known only from rumours as the Time Force.

The Force's scientists have developed missiles capable of neutralising the time orbs, with their only deficiency being that they need to be launched from close range. Our trio's mission then: to take on the hostile planet's military forces and destroy the orbs, whether from the skies, through underground caverns or in the murky depths of the ocean.

Rather than represent the title's three time zones sequentially, the developer has instead chosen to display all three levels at once using a spilt-screen technique, which results in three extremely confined playfields to navigate. There's certainly no shortage of enemy combatants, and the slightest contact with one reduces your mission's stringent time limit.

Making good time is the key to success, and to do that you have to perform measured and precise manoeuvres in tight spaces, in order to target the time orbs while avoiding enemy fire and kamikaze attacks.

» [C16] Two zones remain frozen in time as you battle the enemy in a fighter jet.

» JET BRIX

■ DEVELOPER: SHAUN SOUTHERN ■ YEAR: 1986

■ A combination of *Jet Pac* and *Tetris* might seem like an unlikely recipe for gaming success, but luckily the end result was this cracking shooter/block-stacker.

» MONKEY MAGIC

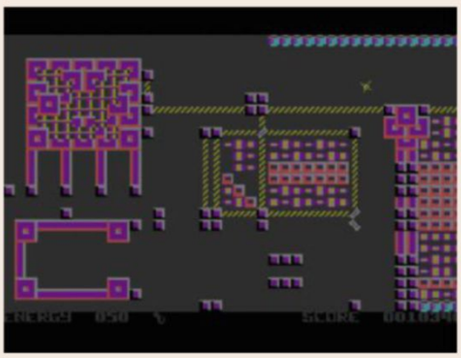
■ DEVELOPER: JOHN P. SHAY ■ YEAR: 1985

■ The gameplay offered here revolves around the cloud riding battles fought by the titular character of the cult show *Monkey*. A frantic shoot-'em-up.

» MAYHEM

■ DEVELOPER: EVAN PARTON ■ YEAR: 1984

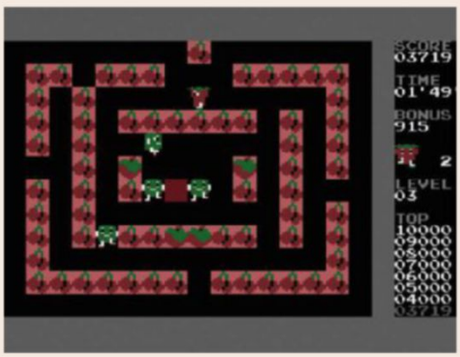
■ You're tasked with rounding up a pesky group of aliens. Although perhaps lacking variety, *Mayhem* provides a pleasing high score chase.



» SPORE

■ DEVELOPER: JIM BAGULEY ■ YEAR: 1987

■ **It should have** been impossible for them to escape their hermetically sealed containers, but the genetically altered spores have contaminated the laboratory, leaving no survivors. The pesticide developed to kill them remains in the lab, so now every barrel needs to be collected and used to destroy them. As you're waved past the quarantine checkpoint you hope your weapon at least keeps the spores at bay while you search for. Although it's an overhead shooter with opponent-spawning generators, *Spore* plays very differently from *Gauntlet*; attacks are more frantic and the play area more confined, with the result being far edgier gaming.



» TUTTI FRUTTI

■ DEVELOPER: SHAUN SOUTHERN ■ YEAR: 1985

■ **In this polished** fruit-'em-up you play no ordinary strawberry, but Super Strawberry himself! Your mission: to collect the cherries in the orchard, held hostage by the evil Acid Apple Gang, then put those rotten apples out of business. Although heavily outnumbered, you have a few special powers up your cape, such as apple-defeating power pips, which you can ricochet around the playfield, and super strength, which you can use to squash your fruity foes. As you would expect from the talented fingers of Shaun Southern, *Tutti Frutti* is a slick piece of coding. Obviously he's taken inspiration from *Mr. Do!*, but it's more of an interpretation than a straight copy.

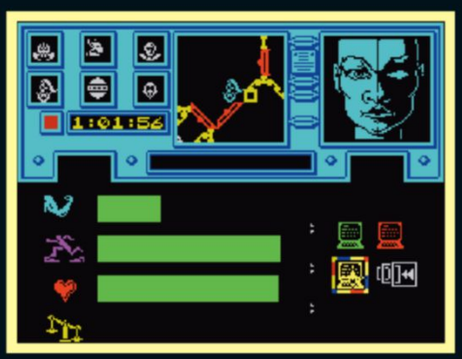
» RESCUE FROM ZYLON

■ DEVELOPER: MARK J. MOORE ■ YEAR: 1985

■ **The mines of** the planet Zylon are renowned for flooding, but the precious stones and metals found there represent riches beyond compare, so it comes as no surprise when the emergency call comes through on your airship's radio. A team of geologists is trapped by rising floodwater. No other craft is close enough to attempt a rescue, leaving you little choice but to brave the tight spaces of the cavernous mines and the acid rain that drips from their ceilings. While a pretty decent rescue game, the strongest element of the game is its requirement for precision navigation around the claustrophobic chambers of the mine, which visually is simple but effective.

OUT OF THE SHADOWS, INTO THE FIRE

The well-respected Denton Designs developed a number of great games over the years, with Shadowfire and its sequel Enigma Force being among its most popular titles. Martyn Carroll chats to the Dentons and uncovers the story behind the Shadowfire trilogy. That's right, we said 'trilogy'...



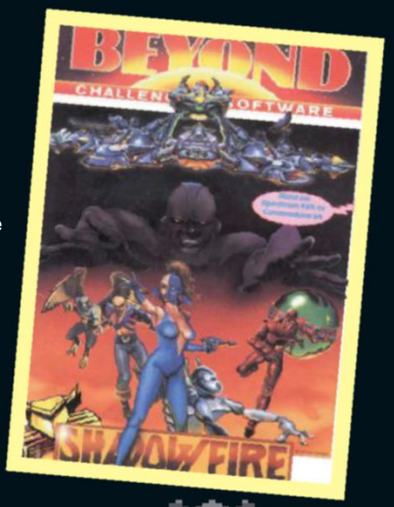
SHADOWFIRE

The game that started it all

It's fair to say that the gaming magazines were a bit baffled by *Shadowfire*. This space-based, icon-driven, strategy adventure type thing couldn't be lumped into the usual gaming categories. *Crash* called it "a state of the art game of the 'modern' sort (i.e. hard to define exactly)", while *Zzap!64* began its review by explaining just what the devil these new-fangled 'icons' actually were. One thing was clear though – *Shadowfire* was very good indeed. *Crash* smashed it with a 96% rating while a score of 91% saw it sizzle in *Zzap!64*. Other magazines heaped praise on this innovative, intelligent title that defied straightforward description.

Shadowfire was published by Beyond Software and developed by Denton Designs, the Liverpool-based outfit made up mostly of ex-Imagine Software staffers. One of Denton's traits was to the credit the company rather than individuals so it's not easy to determine who exactly was behind *Shadowfire*. Graphic artist Karen Davies was one of the original Denton directors and she reveals that the game was indeed a collective endeavour, although some key people were involved.

"The original idea for the game came from Ian Weatherburn," she says. "He was one of the original Denton crew but left fairly early on. Where he got the original idea from I don't know but when we were designing we looked at everything – comics, movies, animations, books. Steve Cain and Ally Noble had graphic design backgrounds and I came from a textile design background so we had different influences which we all drew from. I would say Steve was the driving force behind *Shadowfire*. Everyone gave ideas on the look and the play and all were considered within the boundaries of the game and the capabilities of the machines. Steve and Simon Butler worked a lot on the background story and again we all added ideas."



Simon's role was to flesh out the original concept. "I suppose I was the ideas guy," he says. "I was the geek who read American comics, watched all manner of bonkers movies, spent every hour in the arcades and read all the mags. It's this wellspring of ideas that fed *Shadowfire*. They had a kernel of an idea, a team on a ship and they had to rescue someone. That was pretty much it. They were more interested in the whole

> I saw the Enigma Force as the X-Men. In my mind I saw it as a comic/movie tie-in SIMON BUTLER

CHARACTER BIOS Who's who within the six-strong Enigma team

ZARK MONTOR

■ Zark is the team leader. The Empire recruited the human following years of sterling service, during which he lost one of his arms (hence the cybernetic replacement). Zark is crucial to the mission as he is a translator and the only character that Kryxix will trust.

SEVRINA MARIS

■ At just 22, Sevrina is the youngest member of the Enigma team. Prior to being recruited she faced the death penalty for several crimes. Her chief skill is her ability to pick locks, making her vital in the early stages of the mission before you get the ship's master key card.

SYYLK

■ Insectoid Syylk is second in command to Zark. His biggest asset is his strength, which makes him the perfect character to lead the early battle against Zoff's crew. Despite a deep personal hatred of Zoff, Syylk does not allow this to affect him and he never disobeys an order.

TORIK

■ Like Sevrina, avian Torik has a dubious past and was enlisted from prison. He's an excellent scout and therefore useful for mapping out Zoff's ship when you first beam down. He's reported to be good with explosives, although in this regard he's actually no better than other team members.

MAUL

■ This weapons robot boasts excellent defences but is slow and therefore has difficulty keeping up with other team members. As such, you should only beam him down to the ship if the mission is going badly and casualties are stacking up. As with Syylk, MAUL may be useful in the early stages.

MANTO

■ Manto is a transporter droid which means it has the capacity to beam itself and others to locations in Zoff's ship. Manto is essential to the mission's success, yet it's relatively weak so must be protected at all costs. Should Zark fall then Manto also has the ability to rescue Ambassador Kryxix.

» [C64] Character movement is controlled by clicking the arrow icons.

process being icon-driven, which for the time was pretty radical I suppose.

"I wrote a short novella – the back-story of the characters, the whole Enigma Force organisation and so on. I helped with the character designs, I nailed down their names, did sketches for each of them that were eventually used in the manual. I designed the cover artwork and did a rough layout that was then finished by Steve. I saw the Enigma Force as the X-Men. In fact the poses for a lot of the characters in the manual and on the cover are lifted directly from *X-Men/Teen Titans* crossover by Chris Claremont for Marvel and DC. In my mind I saw it as a comic/movie tie-in. I thought *Shadowfire* was pretty damn cool for the time. It got some cracking reviews and rightly so."

The Enigma Force was a group of mercenaries enlisted by the Empire to rescue Ambassador Kryxix from the clutches of rogue dictator General Zoff. Kryxix was holding highly sensitive information about a powerful new starship – Shadowfire – so it was vital to rescue him before Zoff discovered the plans. You had to infiltrate Zoff's starship, rescue Kryxix and capture Zoff, then either destroy the ship by triggering the self-destruct mechanism or seize control of it by capturing or killing all of Zoff's personnel. And the clock was ticking – you had just 100 real-time minutes to complete the job.

Beyond debuted *Shadowfire* in April 1985 as a dual format release containing both the Commodore 64 and Spectrum versions on one tape. Coding work was split between Dave Colclough for the (lead) Commodore 64 version and John Heap for the Spectrum release, while the game was later ported to the Amstrad CPC. The in-game music for the C64 version was composed by Fred Gray.

John can't recall any significant problems arising during coding. "Apart from the odd bug, the development went well," he says. "The C64 version had a complicated iris transition that involved writing into the hardware sprites and I know that caused Dave a few problems. I did a much simpler Louvre effect on the Spectrum."

John clearly remembers where the idea for one of the game's key features, the icon-driven interface, came from. "At Imagine we were all impressed by the icons on the Apple Lisa computers that senior management were using in their increasingly frantic efforts to balance the books. We used icons as a quick way to communicate to your character's quite complex actions." Ally Noble agrees: "My memory was programmers seeing the icons on an Apple computer and thinking 'That would be so cool in a game world!'"

The icon control system was heavily promoted by Beyond who sold it as "The first adventure game without text!" Fuelled by strong reviews, *Shadowfire* was a solid hit, peaking at number three on the all-formats chart during June 1985. *Shadowfire Tuner*, an add-on tape that could be used to tweak various game elements (such as character stats and objectplacement), followed a few months later, but this was just a stop-gap release ahead of a proper sequel. Ally says: "Steve had sold the *Shadowfire* concept to Beyond and they were one hundred per cent on board and keen for it. A sequel was discussed early on in the cycle, in that it would exist should the first did well."

PHANTOM MENACE

■ *Shadowfire* came bundled with a detailed manual that explained how to play the game and provided background information on the Enigma team and the various enemies you'd face. At one point the manual imparts a bizarre bit of advice: "Beware the Phantom. Zoff's invisible pet alien roams the starship attacking characters at random."

It turns out that this mysterious 'Phantom' was concocted to account for a perplexing bug. Speaking in the July 1985 issue of *Sinclair User*, Steve Cain came clean: "On the Commodore 64 there was a bug. A phantom would appear and attack members of the Enigma team. We couldn't work out why, so we decided it was Zoff's pet. It turned out there was a spelling mistake on a single mnemonic in the machine code somewhere. We've taken the bug out now." So while the bug was successfully squashed prior to release, the manual had already been printed, allowing the legacy of Zoff's impalpable pet to live on.

» This indispensable map of Zoff's ship, drawn by Oli Frey, appeared in *Amtix!* and *Zzap!64* magazines.

» [C64] The Commodore version allows you to control the game using a light-pen!

» [Spectrum] Following fights you should wait for your character's strength to return.

Enigma Force

Behind the scenes of the highly anticipated sequel

Work began on the follow-up within weeks of *Shadowfire*'s release. Steve Cain drove the design forward and worked on the graphics alongside Karen Davies. Coding duties were once again handled by Dave Colclough (Commodore 64) and John Heap (Spectrum), while Fred Gray contributed another fine tune for the C64 version. The game was published by Beyond.

While it retained the icon-driven interface, *Enigma Force* introduced the 'Mind Probe' feature which enabled players to take direct control of characters. Once under your command, you could move team members around the game's map and engage in combat with enemies. John reveals that the team actively set out to create a more arcade-style, accessible game. "This was driven a little by us programmers who wanted to try something different," he says. "There were new ideas there too. Stacking commands, scrolling menus, rule-based AI, and the background mechanic of an unending war between the two factions."

Those factions were the Insectoids and Reptiloids, two races who were waging war against each other on a planet where the Enigma team's ship had crash landed. Zoff was imprisoned on-board and he'd now escaped, and was being protected by the Reptiloids who were loyal to him. Your mission was to hunt down Zoff and eliminate him and escape the planet.

Enigma Force was released in February 1986 and generally garnered very good reviews; overall ratings were slightly down on *Shadowfire*'s stellar scores but not by much. The harshest critique came from *Zzap!64* who found the game "disappointing" and awarded it 65%. Reflecting on the follow-up, John has reservations about some of the choices they made. "*Enigma Force* wasn't as satisfying," he says. "I think money-wise it may have been better to have done more of a genuine sequel. We had to write a great deal of code from scratch, and the mind control icon kind of negated the strategy part of issuing your team with real time orders. So I believe we may have upset the *Shadowfire* fans without convincing more arcade-orientated ones to get on board."

» [C64] Your first task is to find the Insectoid queen and convince her to side with you.

» [Spectrum] Buckle up and blast off. Zoff is gone and the mission is complete.

Comparing *Enigma Force* to the original, Karen comments: "I was and still am very happy and very proud of the first game. I felt we did good with that one both visually and playability wise. I am not sure if *Enigma Force* worked as well but we tried. I feel I wanted so much more for that game, visually anyway, and computers were not capable of what I saw in my head. It was okay and I am still happy to put my name to it."

After the game's release, several key people including Karen and Steve left the business to pursue other opportunities. However, Denton continued to develop games for a further decade, creating such hits as *The Great Escape* and *Where Time Stood Still*. There would be no third outing for the Enigma team, although years later plans were afoot to bring the gang out of retirement…

The departed

■ Discussing *Shadowfire* and *Enigma Force* can be a poignant experience as a number of people involved in the games are no longer with us. This includes Ian Weatherburn, who came up with the original concept for *Shadowfire*, and Steve Cain, who developed the idea and was instrumental in the creation of both games. In fact it was Steve who presented *Shadowfire* to Beyond and secured the required funding to develop the game. Also sadly departed is Dave Colclough who joined Denton following Ian's departure and programmed both of the *Shadowfire* games on the Commodore 64. Ally Noble has fond memories of all three. "It would be nice to mention our departed colleagues, Ian, Dave, and Steve," she says. "Particularly Steve whose enthusiasm, design and illustration skills made *Shadowfire* everything it was."

» The Dentons, from left to right: Ally Noble, John Heap, Dave Colclough, John Gibson, Steve Cain and Karen Davies.

Character bios

Six become four in the sequel

ZARK MONTOR

■ Zark retains command of the team for this deadly second mission. His all-round ability means he's useful in any situation. Remember that Zoff fears Zark, so should he manage to trap him in a room without an exit, the general will surrender to the Enigma team leader.

SEVRINA MARIS

■ The 'mistress of mayhem' returns and in this mission it's her marksmanship and experience with weapons that prove most useful. Once you spot Zoff, Sevrina is a good choice of character to chase him down and eliminate him. A well-placed grenade should do the job.

SYYLK

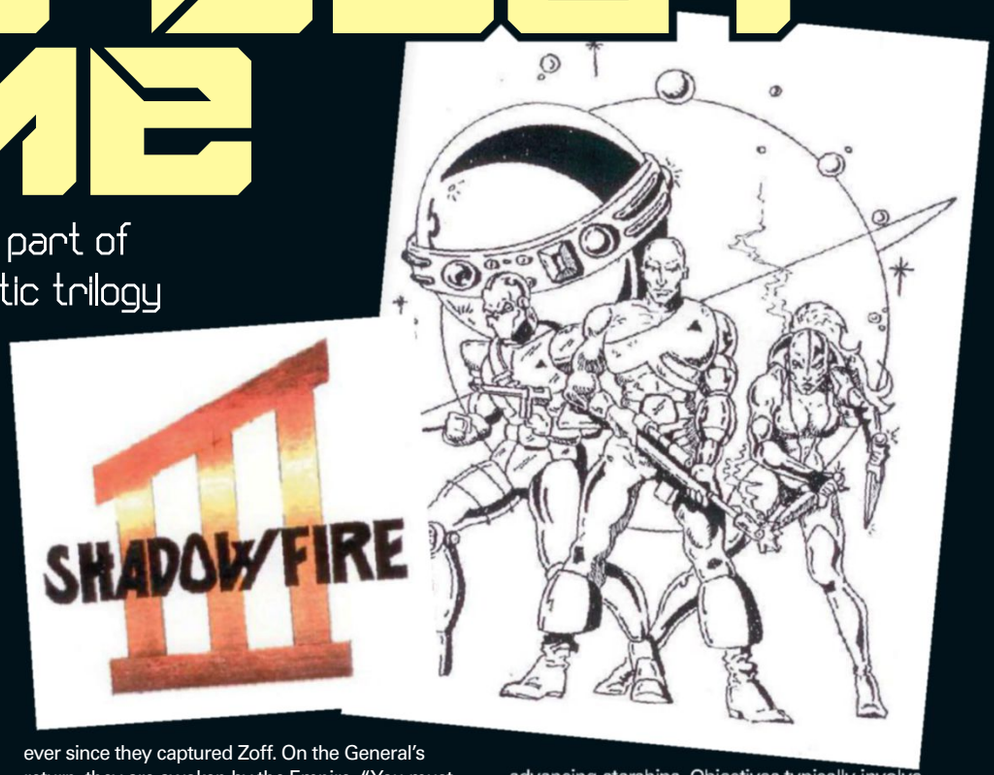
■ Once again, Syylk's strength and stamina prove to be extremely useful at the beginning of the mission. As the action takes place on Syylk's home world, it's an absolute priority that you use him to locate the Insectoid queen and make her an ally to the team.

MAUL

■ Poor MAUL is slow as ever, meaning that the weapons droid cannot really be used as an offensive team member. However, he carries crucial armaments on behalf of the team and should be called upon if the team need him.

THE LOST GAME

We reveal the final missing part of Denton Designs' intergalactic trilogy



An amazing *Shadowfire* secret can now be revealed. Retro Gamer has discovered that Denton Designs began work on a third *Shadowfire* game in the Nineties. This isn't based on a press rumour or vague recollections from a Denton employee – in fact, neither Ally Noble nor John Heap have any clear memories of the game at all. The evidence we have is more first-hand; a detailed, 32-page game concept document that outlines the proposed back-story, characters and gameplay of *Shadowfire III*.

The document was handed to us by game artist Dennis Gustafsson. We interviewed Dennis in 2009 about the making of *Die Hard Trilogy*, and while he was searching for his old design sketches for that game, he uncovered the *Shadowfire* document. "I've found a nugget in my old stuff box," he told us at the time. "It's the initial game concept document for *Shadowfire III*. It was sent to me by Ally Noble from Denton Designs, my favourite developers on the C64. This is the only document I've saved through the years. I still remember the happy disbelief of getting involved. I remember discussing having self-motivation as a trait for the Enigma team members but that is about all. The game was in planning when Denton shut down and got soaked up by Rage Software. I really wanted to be in on designing that. Instead I went to the Denton's closing down do. It's so sad it didn't come to pass. It would have been a great honour to be involved, even to a small degree."

» Denton director throughout the company's lifetime, the ever helpful Ally Noble.

The document itself is not dated (the closest we have is a description of the viewpoint, which was to be "top-down, as used effectively in *Alien Breed*", establishing that the document was written at some point after the release of the Team17 title in late 1991). Denton was acquired by Rage Software at the end of 1995, so it seems likely that the game was being worked on during the firm's final year. As for format, Dennis believes that the lead platform was the PC. "I think it was for the PC but cross platform was likely," he says. "PC, PlayStation, Saturn maybe. Not the Amiga as that was phasing out at the time."

The document begins with the game's plot. The story takes place 30 years after the end of *Enigma Force*. It appears that General Zoff was not eliminated in the last game, but rather captured and banished to the edge of the galaxy. He escapes, naturally, and begins to amass a battle fleet capable of taking on the mighty Empire. The Enigma team members, meanwhile, have been resting in stasis ever since they captured Zoff. On the General's return, they are awoken by the Empire. "You must control the Enigma Force on a series of do or die missions," reads the document. "Success is vital. YOU are the Empire's only hope!"

The six-strong team from the original *Shadowfire* return and are joined by three new characters that all have unique skills (medical droid Keo, weapons specialist Xenon Zux, and computer expert Piscapod). The document describes seven separate missions (although additional missions are alluded to). The missions advance the storyline and each one takes place on-board one of Zoff's advancing starships. Objectives typically involve rescuing allies or kidnapping enemies, and in one fun-sounding mission you have to trigger a ship's self-destruct sequence and escape before she blows. The final mission sees you board Zoff's personal starship, Zoff VI, and attempt to assassinate him.

The document is keen to point out that each mission contains various secondary tasks that must be completed. For example, for the ship destruction mission mentioned above, a primer dongle is required to activate the self-destruct mechanism and this is stored in a safe. The passcode for the safe has been split into four parts and distributed among various security personnel who are located on different decks of the ship. So you need to find and eliminate each of the guards holding the codes. And before you can even start to do that, you need to grab an ID keycard from a lowly operative so can

> It's so sad Shadowfire III didn't come to pass. It would have been a great honour to be involved
>
> DENNIS GUSTAFSSON

THE NEW SHADOW

■ *Shadowfire III* may have not appeared but there exists a spiritual successor in the shape of *Dark Inference: The First Shadows*. This free Flash game was developed in 2009 by John Heap and his Good Game Company. "*Dark Inference* was inspired by *Shadowfire* but wasn't meant to be *Shadowfire III* as such," says John, who may in the future release the game on other platforms. "I did intend to develop the *Dark Inference* theme and universe. Maybe I'll revisit it when I have more time. It will definitely be a 'labour of love' rather than a 'for profit' exercise." To play the game go to www.thegoodgamecompany.com/ditfs.html

activate the computer terminals, thereby opening locked doors and opening up the entire ship.

To complicate matters, if the body of the operative is discovered by a guard, their missing keycard will be invalidated so you need to make sure bodies are hidden away or at least left in areas that are not regularly patrolled. The document states: "The Enigma Force will work most effectively if they are used in a series of undercover missions, infiltrating the enemy starships. Once aboard they will neutralise personnel and assume their identification, thus gaining access to the ship's computer systems."

Describing the setting, the document reads: "The starships are huge and comprise of decks which are interconnected by a lift system. Most lifts don't give access to all decks. Just like a small city, everyone goes about their daily business. The crew is a mixture of droids and humanoids. All areas will have their own personnel. For example, the drive room will be mainly engineers. Also, the more important the area, the more security will be present."

Prior to the shuttle docking sequence that begins each mission, you can choose a maximum of four characters from those available. As characters have varying strengths and skills, the document advises that it's important to read the mission briefing and choose the most suitable characters, as well as select the right equipment for them. The action is viewed from above and fairly standard mouse controls are implemented. Having selected a character, clicking the left mouse button onscreen will see them move towards that point. A double-left click is the 'action' button, used to pick up items or activate computers etc, while a right-click is used to fire a weapon (providing a weapon is drawn).

There follows illustrations of the various on-screen status displays that appear to the left of the main window. The final two pages reveal a list of in-game objects and weapons. Useful items include a proximity alarm that alerts you when a security droid is patrolling nearby, and a cloaking device that prevents on-board scanners from detecting any hidden weapons you're holding. Your arsenal features a short-range laser pistol, medium-range plasma rifle and maximum impact rocket launcher. Various mines and grenades are also available, as well as devices that will stun humans and droids.

The blank back cover is useful as it helps prove the document's legitimacy. It includes a copyright notice, the Dentons' Liverpool address and the names of directors John Heap and Ally Noble. Sadly there are no clues as to the actual author(s).

Having studied the document in detail we're confident that had the proposed *Shadowfire III* concept been developed and released in the mid-Nineties, it would have been well received by strategy gamers. It goes without saying that fans of the *Shadowfire* series would have lapped up a third instalment, particularly as it sees the return of the original Enigma 'gang' and drops them into an exciting, new conflict against Zoff.

Alas, *Shadowfire III* never materialised and can be added to that long list of 'lost' games. But thanks to the existence of this concept document, we have a unique understanding of what might have been.

CHARACTER BIOS

These profiles are taken directly from the design document

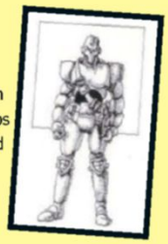
ZARK MONTOR

■ "Humanoid native of Cyron in the Orak system. A hardened fighter, he is versed in the fighting skills of both the academy and the martial arts of his home world. His artificial arm gives him fighting strength far beyond normal humans. One of the Empire's most valuable assets."

SEVRINA MARIS

■ "Humanoid native of New Mars in the Earth II system. She is an excellent marksworman and a locksmith without peer. Her knowledge of firearms and explosives is almost as extensive as that of her rumoured partner and tutor Torik. It's hoped she will become one of the Empire's top agents."

SYYLK



■ "Insectoid native of Khryzthys in the little known Auron system. Fearless in the face of battle, he has been involved in many missions against Republican troops and displays an almost boundless hatred for his opponents matched only by his ferocity and tireless strength."

TORIK

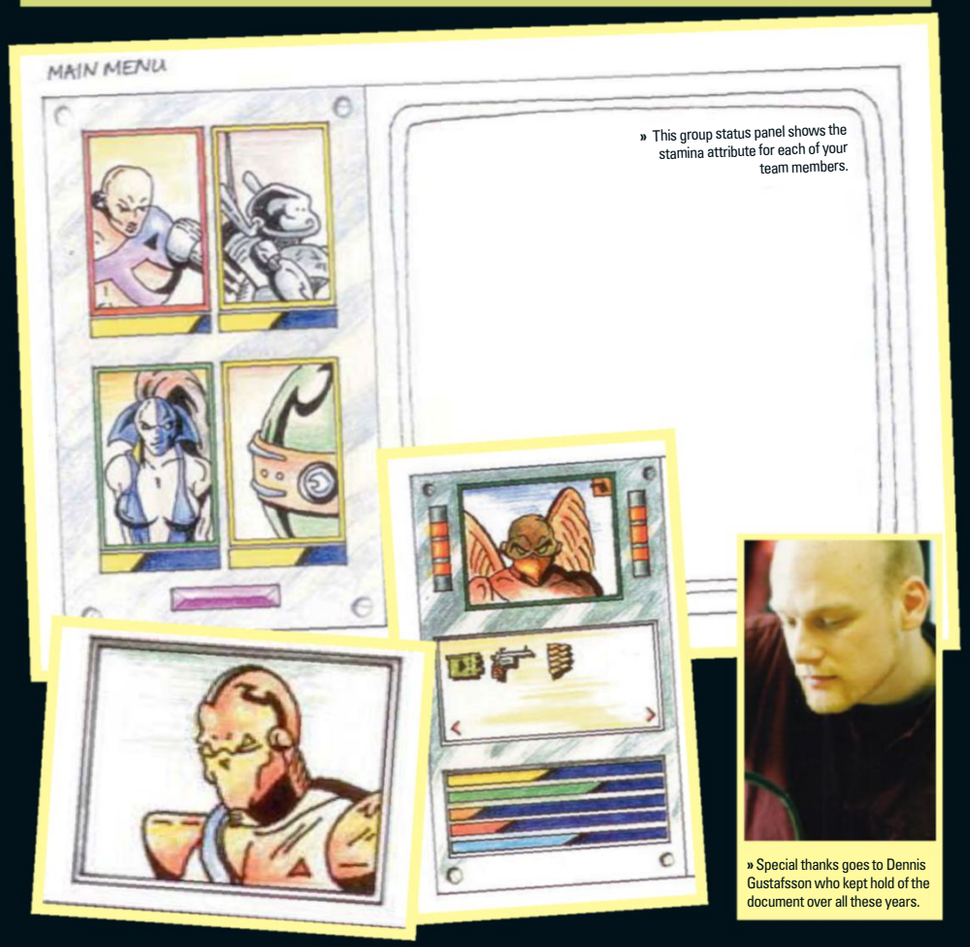
■ "Avian native of Chresin in the Thalus system. A pirate among the lesser worlds. His powers of flight are obviously useful but his knowledge of weapons and explosives makes him a vital member of any strike force. Upon his recommendation Sevrina Maris is due for induction."

MAUL

■ "Robot construct from Enigma's mech division. Utilising an old external design, it is secretly one of the latest and most deadly innovations from the special weapons force. Slaying all who stand against it, MAUL is almost indestructible though rather slow. Yet to be fully tested."

MANTO

■ "Robot construct from Enigma's mech division. Manto, now an outdated unit, is used primarily to place trans-pads in enemy territory unassailable to other team members. Must be well defended. This particular model displays humanoid traits in its speech and personality modes."



» This group status panel shows the stamina attribute for each of your team members.

» Special thanks goes to Dennis Gustafsson who kept hold of the document over all these years.

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In the chair with...

STEVEN KELLY

Steven Kelly has been involved in the computer industry since the early Eighties, working initially for Mikro-Gen and Psion before branching out on his own and becoming one of the founders of the Bitmap Brothers. Here he talks about his early days in the computer industry and his time spent at Psion

IF YOU WERE at the birth of the ZX Spectrum then you'll remember a time when there weren't thousands of games available for the machine. There were very few companies making software, and even fewer making good software. One company that could always be relied on to produce quality product was Psion, whose early days are inextricably linked to Sinclair itself – Sinclair's name was on every cassette box it produced, after all. Steve Kelly worked for Psion in those early days crafting masterpieces such as Chequered Flag and Match Point out of very limited hardware. Here Steve tells us how he got into the computer industry, his development processes and what it was like being part of a key ZX Spectrum developer like Psion.

You have written some classic games in your time; what was the first videogame you remember playing?
I played *Pong* in Blackpool Pleasure Beach in the Seventies. I remember being drawn towards it and was totally fascinated.

Many of the early programmers were doing other jobs when they took up computers as a hobby. What were you doing before you got into programming?
I'd dropped out of Warrington Tech College and had worked at a couple of retail stores in the town to make ends meet.

Were you aware of the growing computer game scene?
I'd been playing games for as long as they had been out. All of the money I earned was spent in the pubs and arcades playing videogames.

It's a big leap from playing computer games to coding your own. How did you get into computer programming?
In 1979 I'd got myself a Mattel Intellivision console and pretty much by that time I'd decided that simply playing games wasn't good enough. I wanted to write them.

Upon which computer did you begin learning to code?
In 1980 I picked up an injury that finished off my 'career' and put me on my back for a few months, and it was then that the ZX80 was released. By the time the ZX81 was released the following year, I'd learnt programming from reading listings in magazines and was ready to get hold of one to play with – which I did.

How easy was it for you to learn programming from scratch?
The biggest spur to becoming a true programmer was fact that the Zilog Z80 instruction set and ZX81 system variables were printed at the back of the manual. Put a load of jargon and seemingly random letters and numbers in front of an inquiring mind with nothing to do and hey presto... computer geek born!

This instant love of coding led you to start writing games at home, and you submitted some early games to Micro-Gen. How did that come about and what were they?
Once I'd learnt Z80 assembler there was no stopping me from ripping off every game in the arcade! I sent a couple of these – *Super Glooper* and *Frogs* (adaptions of *Pac-Man* and *Frogger*) to Mikro-Gen. A couple of weeks later I received a letter with a promise of royalties and a couple of thousand pounds advance.

Could you talk a bit more about the writing of your early games for Mikro-Gen? How long did they take to write, what computers were they for and did you actually make any money from them?
I didn't really write games for Mikro-Gen. I had already written the games at home whilst out of work and simply sent them on to Mikro-Gen to publish. I only met the guys at Mikro-Gen a couple of times. I think I made a few quid... but not a massive amount!

SELECTED TIMELINE

Super Glooper and Frogs (ZX81) 1982
VU3D (ZX Spectrum) 1982
Backgammon (ZX Spectrum) 1983
Chequered Flag (ZX Spectrum) 1983
Computer Scrabble (ZX Spectrum) 1983
Match Point (ZX Spectrum) 1984
QL Chess (Sinclair QL) 1984
QL Scrabble (Sinclair QL) 1984
Cadaver (Amiga, ST, PC) 1990
Speedball 2: Brutal Deluxe (Amiga, ST, PC) 1990
Chaos Engine 2 (Amiga) 1996
Z: Steel Soldiers (PC) 2001

"By the time the ZX81 was released the following year, I'd learnt programming from reading listings in magazines"

NUMBER *CRUNCHING

68000: the number of the chip that lured Steve away from the ZX Spectrum

71: the percentage that Chequered Flag scored in it's Crash magazine review

30: the number of years since Chequered Flag was released upon the world

12: the number of weeks that it took to write Chequered Flag

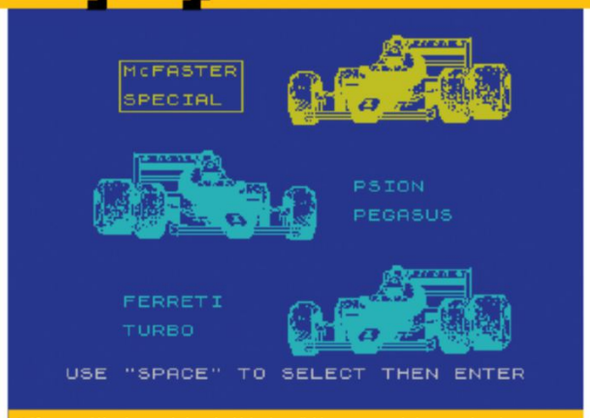
8: the number of bit computers that Steve generally wrote for at Psion

4: the number of players possible to play the game in Psion Scrabble

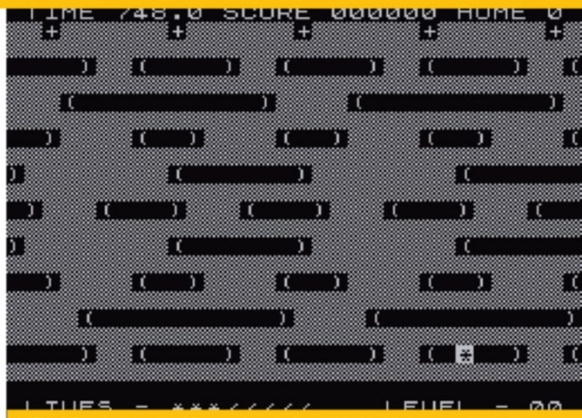
3: the number of months it took to convert Match Point from the TI-99

2: the number of games you got on one tape cassette, with Super Glooper and Frogs

1: the number of times Steve met Sir Clive Sinclair whilst working at Psion



» [Spectrum] Here's your choice of vehicle, they all drive pretty much the same though.



» [ZX81] *Frogs* is a fast-paced *Frogger* clone that's surprisingly addictive.

Although you famously wrote some of the seminal early Spectrum games, you started writing games for Sir Clive's earlier machines. What games did you write for the ZX81?
Frogs, *Super Glooper*... I think they were the only two. I did a centipede game but that was never released.

Mikro-Gen was quite a small company, what led you to get a job at Psion?
The two Mikro-Gen games had been published by Psion. I thought I'd give them a cold-call and have a chat. Within five minutes I was on the phone talking to the MD, David Potter, and getting an invite for an interview in London.

How soon after the interview were you a fully fledged member of the Psion team?
By the end of the month I'd moved 'down south' and started work.

Psion was one of the top developers for the Spectrum in the early Eighties, so it must have been exciting to start work there. What was the first project you worked on there?
I think the first project was *VU3D*. I think the sheer audacity of writing a 3D modelling package on the Sinclair Spectrum summed up Psion... they really did know no bounds!

Many companies did not always develop games directly onto the Spectrum, rather they wrote on development machines, and then 'squirted' the code across to the Sinclair machine. What machines did Psion use to develop their programs on?
In the early days we wrote and assembled all the code on the TRS-80. Connected to this was an amazing 'box' that Andy Clegg created which (as I remember) contained shared memory with the Spectrum. With a flip of a switch, you could test the code on the Spectrum or flip back to debug.

After the TRS-80, what machine did Psion use to develop programs on next?
The company quickly outgrew the TRS-80s, and had bought a DEC VAX 11/750.

Can you give any detail about the DEC VAX 11/750?
It was a beast! It was the size of a large washing machine and was kept in its own air conditioned room.

Can you remember any of the technical specifications of this beast of a machine?
I can't remember how much memory it had... but not much by todays standards. Certainly less than 8Mb. It cost a serious amount of money!

Now onto perhaps your most famous Spectrum game *Chequered Flag*. In our minds it is a really impressive Spectrum game considering it arrived so early in the machines lifetime, what gave you the idea to write a Formula One simulator?
The arcades were the source of a lot of inspiration and around the time of *Chequered Flag, Atari Pole Position* was THE definitive arcade game. I guess the idea came from there.

***Chequered Flag* had a pretty good realistic race experience. How did you go about achieving this. Did you do any actual testing of cars?**
I couldn't even drive in those days! But the 'engine' was written by Stephen Townsend – an avid driver and kart racer. He knew exactly how engines worked and used his experience in the coding.

Nowadays we are used to exact digital copies of tracks on games like *Gran Turismo*. How accurate were the tracks on *Chequered Flag*, and did a lot of work go into this?
In our research we'd bought lots of magazines on motor racing. One of these featured a page of layouts of all the major Grand Prix tracks. Using these maps, we sat down with a ruler and measured each one and divided them into sections (as you would if designing the track for a Scalextric set). We then mathematically represented each section. So... not massively accurate but it did the trick!

One of the few criticisms at the time of *Chequered Flag* was that you were racing solo. Would you have liked to have cars to race against in the game?
We did want to put in other cars but we just didn't have the time (yes, we did have deadlines back then). I think we completed the game in under twelve weeks.

» [ZX81] Many developers cut their teeth making arcade clones. This is *Super Glooper*.

> "We did want to put in other cars but we just didn't have the time... We completed the game in under 12 weeks"

***Chequered Flag* got some great reviews in the computer press, and also sold really well. Were you pleased with the reaction to the game?**
Yes. It is very dated now but it got some good reviews at the time and sold a staggering number of copies.

Who else did you work with when you were at Psion?
When I joined, it was such a small company: ten people or so. So everyone knew everyone and it was a tight team. But top mention goes to Chris Jacob who helped get me through the first couple of weeks! The company did grow very quickly and split into different teams – but it did keep the friendly feeling for a long time.

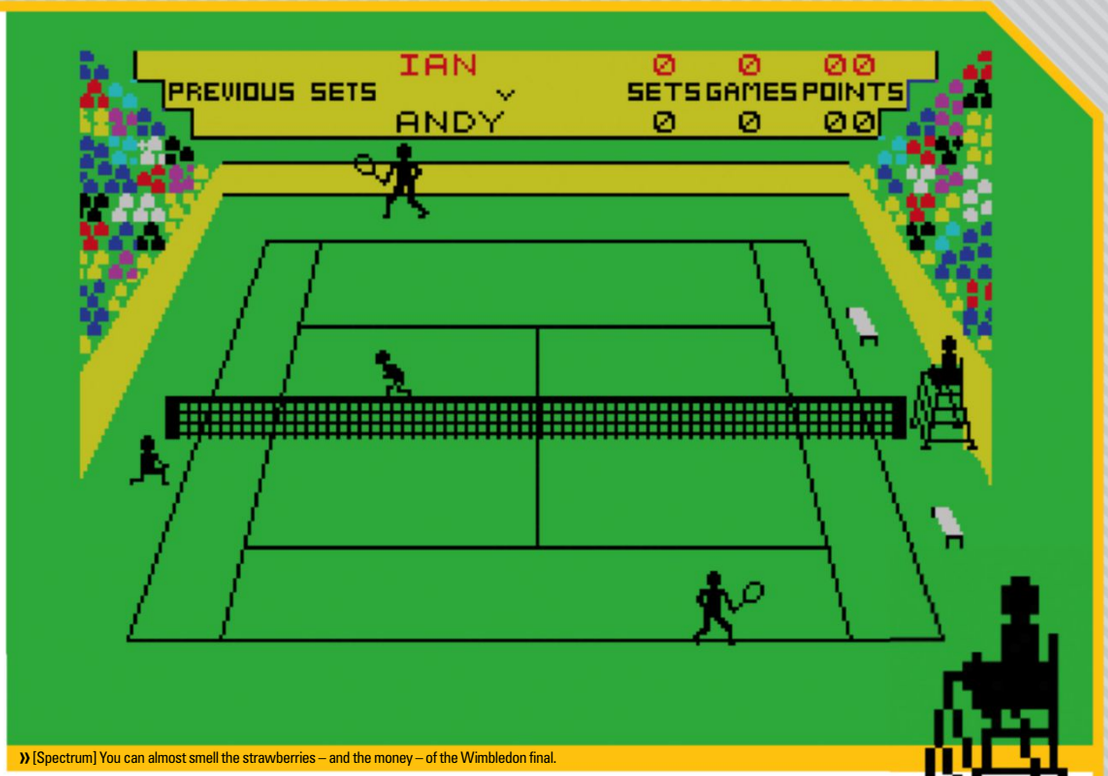
The early Eighties were a really exciting time for the computer industry. What is your favourite memory of those days?
Anyone who attended or exhibited one of the early ZX Microfairs, or one of the many other shows and meetings that took place in the early Eighties will remember just what enthusiasm there was. And it wasn't about money... it was all about discovery.

Did you at the time feel that you were part of an industry that would become something great?
It's hard to put into words but a lot of us knew where things were going. The ZX81 and Spectrum had kickstarted what was to become a world-beating industry and that in itself was exciting.

How easy was the Spectrum to code for?
Depends how you look at it. In some ways it was simple: There were no frameworks, no hardware sprites, no libraries to learn, and assembler is an incredibly simple language given its very nature.

What were the main problems you encountered when writing a program for the Spectrum?
Writing good sprite routines wasn't that straightforward and just one bad instruction could crash the computer. If you were working at home, this meant reloading the program from tape... a very slow test cycle!

Did you come into contact much with Sir Clive Sinclair?
Yes. I met him when he came around to the offices in Huntsworth



» [Spectrum] You can almost smell the strawberries – and the money – of the Wimbledon final.

Mews during the QL development. I remember him commenting just how amazed he was about what could be done on the Spectrum.

You did some work on *Scrabble* for the Spectrum. What was your involvement in that?
I did the front end. My pride and joy at the time was the tile shuffle effect on the Spectrum!

For the time, *Scrabble* was quite impressive with it having a full vocabulary inside 48k of memory. How difficult was it cramming a dictionary into the Spectrum?
Tricky! However, I think the *Scrabble* project had been developed by Peter Turcan whilst at university so it came with a good solid framework. The challenge would have been finding the best compromise of compression algorithm, speed and dictionary size.

You then started work on *Match Point* which like *Chequered Flag* was another sport simulation, are you a great sports fan?
No... Even living near Wimbledon hasn't turned me on to tennis.

How long did it take to write?
It can't have been much more than three to four months. We did things quickly in those days!

What were the main difficulties in writing *Match Point*?
It had been written in France so the biggest problem was all the code comments were in French.

» [Spectrum] Fans of *Scrabble* were treated to a decent conversion on the Speccy.

What computer was the original *Match Point* developed on?
I think it had been written for a Texas instruments computer – a full colour machine – so, as was often the case, the main challenge was adapting to the block colours of the Spectrum.

***Match Point* still looks and plays well to this day? Were you pleased with it when released?**
Yes. Very much so. But because we had seen how good the gameplay was on the original version, we knew it was going to be a hit.

It's interesting you say that *Match Point* was a conversion, as we're sure not many people know that. Can you tell us any more about the French *Match Point*?
I can't really remember! I think it was originally released for the Texas Instruments TI-99 but more than that, I cannot say!

You were at this time now involved in a lot of Psion projects. What other programs did you work on at Psion?
On the Spectrum, *Backgammon*. But after *Match Point* was released, I started working with the QL and worked on *QL Chess* and *QL Scrabble* and an in-house drawing package (which was released at some point after I had left as *Q-Draw*).

You'd had quite a lot of success at Psion, being involved with a lot of best selling games and programs. What made you decide to make the decision to leave Psion?
Psion were moving on. It had increasingly moved away from games – starting with the QL and its 'Exchange' Office package. From there, its focus became the Psion Organiser. I could see its future lay away from what I wanted to do. On the horizon was the Atari ST. I could see that this was a serious machine with serious gaming potential and, as I had a lot of experience on the 68000 chip, felt I had a head start on this machine.

After leaving Psion you started to develop for the new 16-bit range of computers. Did programming for the QL help with the transition to ST and Amiga?
Absolutely. The Motorola chip was essentially the same as the ST and Amiga (68000 series) and coming from the Z80 it was an absolute joy to use. Not only was the chip the same, the QL was powerful enough to be able to write programs using the C language.

Are you still involved today in the computer world?

I still do some freelance work and develop for the web and love programming and technology. But the talent out there today is mind blowing. There are some seriously creative people out there, way out of my league!

What do you get up to away from the technological world?
I spend a lot of time simply enjoying being with family and walking around the coast of the UK.

Are you still in touch with any people from the time?
I do meet up with folks from Psion from time to time. They're a great bunch of people, great fun to be with. Oh... and I met my wife in Psion!

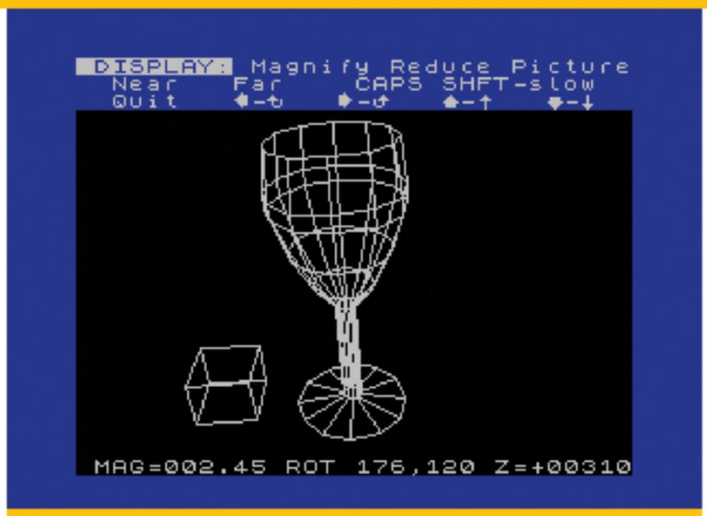
Many games such as Matthew Smith's *Jet Set Willy* and Mike Singleton's *Lords Of Midnight* have recently been re-released for modern devices. Have you considered updating any of your programs for iOS or Android?
The rights to all the games I've ever been involved in are out of my hands now (and have been for a long time). I think some have been converted for iOS and Android, but not by me.

What were your favourite Spectrum/8-bit games?
Any game by Ultimate Play The Game (Tim and Chris Stamper). They were all absolutely brilliant.

What other programmers from the Eighties did you admire?
The guys in Psion were all a bit special, but Colly Myers is the greatest programmer I have ever met. Google him!

Of all the games you have played in your time in the industry what game do you wish you had written?
Shades on Prestel/Micronet! It was such a laugh. It cost Eric Matthews (Bitmap Brothers partner) and I an absolute fortune! I think it was 9p per minute to play. It demonstrated that the future was multiplayer, online gameplay.

Can you go into a bit more detail about the game *Shades*? What was it about? Why did you like it?
Shades was a simple multi-user text adventure game (MUD) that myself and Eric Matthews used to play on Prestel/Micronet in the mid Eighties. You (and lots of other people) would be dumped in a room and given a brief description of what you could see. From there, you could navigate the Dungeon, examine objects and try to find treasure.



» [Spectrum] VU3D may look simple now, but at the time it was a staggering piece of programming.

What kept you playing *Shades*?
It was so simple and ultimately boring. But the fact you were playing with other people, in real time, was new and exciting. It got me thinking about multi-user arcade games, but at that time the technology was too limiting. Connection speeds were too slow.

What about arcade games, which of those early Eighties ones was your favourite?
In the arcade, it has to be *Tempest* or *Qix*.

Did you play any other racing games before you coded *Chequered Flag*?
In the early days there were quite a few top down driving games in the arcades... but then *Pole Position* came along and changed everything. I used to play *Trans-Am* on the Spectrum – I think that was before *Chequered Flag*.

Did you ever play Geoff Crammond's *Revs*? What did you think of it?
I don't think I played it.

Have you played any more modern racing games? If so what did you think of them?
I've played a few including the *Gran Turismo* games on the PS2/PS3 and they are technically brilliant. But to be frank, a good game of *Mario Kart* wins every time!

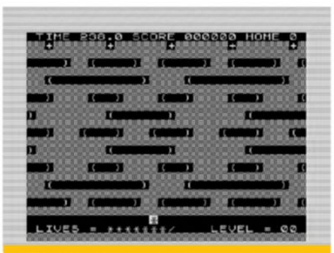
Did you code for any other 8-bit computers?
No. The 8-bit era came and went so quickly and there were so many different computers; you really had to choose one to specialise in and stick to it.

Although you never coded for either of them, what did you think of the Commodore 64 or Amstrad 464 as machines?
I never really looked at them too much, but I was never a fan of the 6502 chip. By the time the Amstrad came along I'd moved on to the QL.

Were you involved in converting any games for other systems?
Nope. In later years (Bitmap

> "It got me thinking about multi-user arcade games, but at that time the technology was too limiting"

» (Spectrum) Now this takes us back...


» (ZX81) Watching those logs is strangely hypnotic.

Brothers), if a game we had written needed a conversion, we'd get someone else to do it.

Of all the programs you have written in your time in the industry, which game are you the most proud of writing?
The very first game I wrote was a *Star Wars* type shooting game written in the BASIC language on a Commodore PET whilst on a course. I wrote it in two days and I remember the pride seeing people actually enjoying playing it. It was from that point on that I realised that this was what I wanted to do with my life.

What piece of code of yours from the time is your favourite?
10 PRINT "HELLO" 20 GOTO 10

How did you go about coping with the infamous Spectrum colour clash problems?
I think, in the end, we had decided to opt for single colour.

Did you try and keep up to date with the technology scene at the time? Did you read computer magazines in the Eighties?
Computer And Videogames (commonly referred to as *C&VG*) was always one to look out for. That had all the latest news from the arcades. You have to remember just how important the arcade scene was in the Eighties. The technology was way above anything you could have in your own home.

Did you keep yourself up to date with any developments in the computer or videogames industries outside of the UK or did you focus on local developments?
There was a wonderful Japanese magazine called *LOGiN* that I would wait for with bated breath!

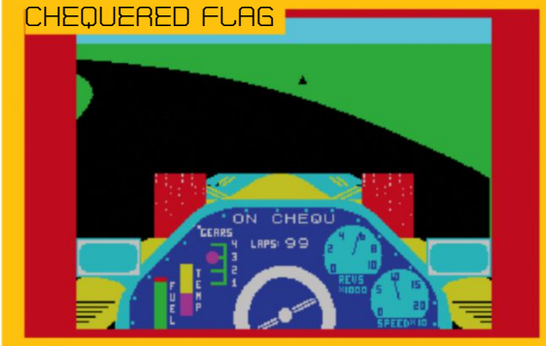
As somebody who was heavily involved in the early days of UK gaming do you still play any modern games?
I've always been a massive admirer of Nintendo. Being such a family man, the Wii was something very special and we played a lot of games on that machine. The Wii U has not long landed in our living room and *NintendoLand* is getting a good run for its money!

Is there a game you play when not with the family?
When I'm being anti-social, I lock myself in the work room and play *Modern Warfare 3* online for hours on end.

FIVE TO PLAY

He would later co-form the Bitmap Bros, but as we're discussing Steven's earlier years we've done the same with our game choices. Enjoy...

CHEQUERED FLAG



IN THE ZX Spectrum world of 1983 you did not have a great deal of quality racing games available to you if you were a big fan of tearing around classic racing tracks. Steve's *Chequered Flag* helped change all that in a big way. Regarded in *Crash* as "The most sophisticated program for the Spectrum with motor racing as a theme" *Chequered Flag* was a genuinely excellent arcade racer that did its best to capture the arcade experience that Namco's *Pole Position* offered. Featuring a 3D view from the cockpit of your car, you could for the first time see the road snaking away in front of you, while oil puddles and trees threatened to spoil your fun. No racing game on the Spectrum before had had such realistic graphics or realistic controls.

Not only that but it featured real circuits such as Silverstone for you to hurtle around, making sure to manage your engine for fear it would explode. For its time it was a technical marvel, and really gave the player the feeling of speed. You could also choose your car from a list of cunningly named racing cars such as McFaster or Feretti.

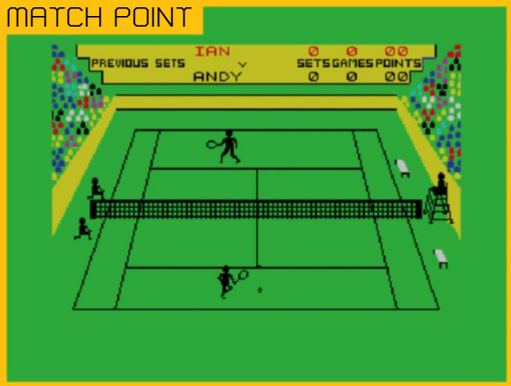
In truth it needed other cars to race against to be perfect – *Chequered Flag* was a solo time trial experience – but it was close enough.

SCRABBLE

SQUEEZING A WHOLE dictionary out of a 48K Spectrum was an achievement in itself, but adding on a complete working game of *Scrabble* that you could play against the computer was something else entirely. Steve's work on the Spectrum version of *Scrabble* is something to admire and remains a fantastic little conversion of the popular board game.

Psion's *Scrabble* may nowadays feature heavily at car boot sales and eBay non sales, but at the time it was rightly lauded as a superb program, playing a full (and challenging) game whilst also looking authentic. Steve worked on the graphical front end of the program, and did sterling work getting Sinclair's little beast to model the board game on your screen. He is particularly proud of the tile shuffling routine he wrote, so give *Scrabble* another try today to see Steve's programming skills in action.

MATCH POINT

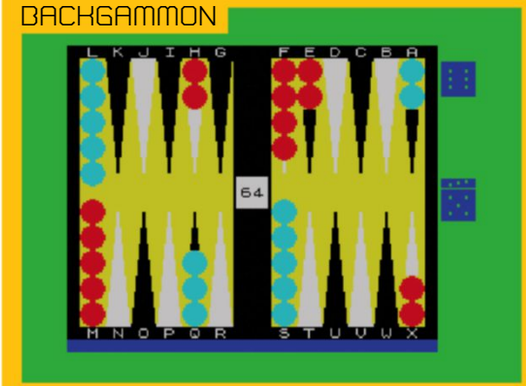


ORIGINALLY A TI-99 program from over the English Channel, *Match Point* was converted by Psion, ending up looking like it had been an English-coded game all along. The green background made you think of strawberries and cream at Wimbledon, while the tightly honed gameplay made you think of all the British players who have failed to win the prestigious event over the years.

Most importantly it played an absolutely superb game of tennis. It is pixel perfect and if you miss the ball, it always feels like it is your fault and not the computer cheating. Even the crowd look like they are following the ball, adding further to the match side atmosphere.

It's a great little piece of coding, and is still worth loading up today, even if just to shout 'Come on Andy!' at the screen.

BACKGAMMON



ALTHOUGH IN THE early days of the ZX Spectrum the shelves were awash with digital versions of classic board games such as chess and backgammon, Steve's version shows his programming skill and attention to detail that was to feature heavily in all his later Spectrum games.

Once loaded up and running you can really see why Psion's games were so treasured on Sir Clive's machine. The dice rolling graphic is genius, and really looks like a dice rolling across your computer's screen. Not only that but using colourful graphics to represent the board, it all adds up to a game that you can see has had a lot of care and attention poured into it.

Backgammon may not be every gamer's cup of tea, but if it is a game you like, then you'll go a long way to find a better version on it on any 8-bit home computer.

SUPER GLOOPER ALSO FROGS

TO GIVE YOU an example of Steve's earliest work in the computer industry we are including his excellent ZX81 double pack *Super Glooper Also Frogs*. Not surprisingly *Super Glooper* is a *Pac-Man* clone, while *Frogs* is modelled on Konami's *Frogger*.

Super Glooper plays quite a good game of *Pac-Man* at a reasonable speed. Whilst the graphics consist of 'O's and asterisks (which is more the ZX81's fault than Steve's) the intelligence of the ghosts is good, and the controls responsive. *Frogs* dispenses with the road section of *Frogger*, and consists just of logs you have to hop your asterisk frog across. It's fun and well written, if a little bit basic.

They are written in pure machine code, at a time when many ZX81 games were still in BASIC, and are surprisingly fast-paced as a result.

Moon Patrol

A CLASSIC SHOOTER THAT TEACHES YOU THE ALPHABET

RETROREVIVAL

» ARCADE
» 1982
» IREM

Impressing gamers with its high level of presentation, *Moon Patrol* is famous for being one of the earliest videogames to show the impressive depth of field that could be achieved with parallax scrolling – the famous graphical trick achieved by having the background graphics scroll slower than those in the foreground, and which quickly became a staple of 2D side-scrolling action games.

Like the vast majority of early arcade games in the Eighties, *Moon Patrol*'s gameplay is really very simple to grasp. You play the role of an intergalactic lunar police officer who, driving around in a weaponised moon buggy tank thing that looks a bit like a Big Track, must travel over the surface of the moon and survive attack from a posse of alien criminals, all the while jumping over any craters and shooting – or jumping – the destroyable obstacles that sit in your path.

Getting through this gauntlet is tough, but the difficulty of the game is softened somewhat by three warning lights that sit in your progress HUD and warn you of incoming attacks. Stages are also divided into a series of checkpoints, starting with A and finishing with Z, and welcome breaks from the action are given at certain points to award you bonus points based on the speed in which you've managed to complete that particular section.

High score chasers will therefore want to try to get through each of section as quickly as they can, as doing so is the key to climbing higher on the high score table. If you manage to complete your mission by reaching the end then your reward is the chance to do it all over again, however this time the course is more challenging. Finish this second run and I believe (don't quote me) the game finishes, unless it loops infinitely? I can't actually tell you as I've only ever been able to get about half way through that second run.

Moon Patrol is a classic and addictive arcade game, and given that it was ported for a whole bunch of machines (it's appeared on everything from the Apple II to the Dreamcast – forming part of *Midway Greatest Arcade Hit's Volume 2*), shouldn't be that hard to track down.

>> This month we take a look at the iOS port of Mike Singleton's Epic The Lords Of Midnight and find out if it's stood the test of time. We also sever limbs in Ninja Gaiden III and DmC: Devil May Cry and go spelunking in Ron Gilbert's The Cave

PICKS OF THE MONTH

DARRAN

Leisure Suit Larry: Greatest Hits & Misses!

It's full of out-dated lewd humour, but I'm still enjoying it.

STUART

Ninja Gaiden III: Razor's Edge

It's still not a patch on *DmC: Devil May Cry*, but this is a huge improvement over the PS3 and Xbox versions.

DAVID

The Lords Of Midnight

An excellent adventure that still feels as fresh and enjoyable as when I first played it.

The Lords Of Midnight

THE RETURN OF THE KING

As close to a massive open-world style adventure game for 8-bit computers as you could hope for back in 1984, *The Lords Of Midnight* is a seminal and ambitious strategy-imbued RPG, one that has lost none of its splendour over time. For this reason most of all, it's perfect for an iOS update, allowing fans to experience this classic anew while giving a new generation of gamers the chance to discover where the origins for games like *Skyrim* and *Baldur's Gate* can be traced.

For the unfamiliar, *The Lords Of Midnight* sees players presented with the expansive Midnight: a striking snow covered land comprising mountains, open plains, forests, settlements and citadels, all of which serve as the backdrop for an epic story with obvious winks and nods to the legendary works of Tolkien. This story tells of a fellowship of four heroes who come together to defeat the despicable Doomdark, the Witchking of Midnight, and this mission could be completed in one of three ways. Players could opt for the stealthy Samwise and Bilbo approach, sneaking around and leading Morkin straight to the Ice Crown – the source of Doom's power. Alternatively, they could send their party out to recruit various lords and armies in a bid to wage an attack on Doomdark's army. The final approach, and the one that's typically taken by Lords Of Masochism, was to employ both tactics at the same time. This allowed the player to effectively hedge their bets, but at the effort of having to partition their brain to keep ahead of the two separate quests, each of which required a different strategy to see to victory. It was a unique concept in a game full of clever ideas.

INFORMATION

- **FEATURED SYSTEM:** IOS
- **ALSO AVAILABLE ON:** ANDROID, BLACKBERRY
- **RELEASED:** OUT NOW
- **PRICE:** £2.99
- **PUBLISHER:** CHILLI HUGGER SOFTWARE LTD
- **DEVELOPER:** IN-HOUSE
- **PLAYERS:** 1

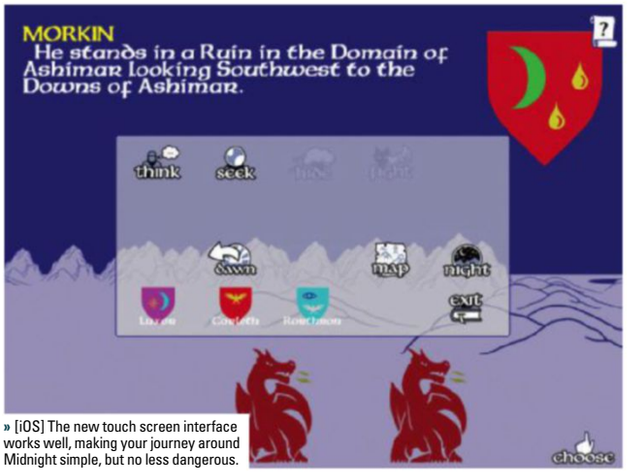
BRIEF HISTORY

» *The Lords Of Midnight* was originally released in 1984 and quickly found popularity and plaudits thanks to its epic story and open world gameplay. A sequel, *Doomdark's Revenge*, was released the following year and was followed by a late PC sequel, *The Lords Of Midnight: Citadel*, in 1995.

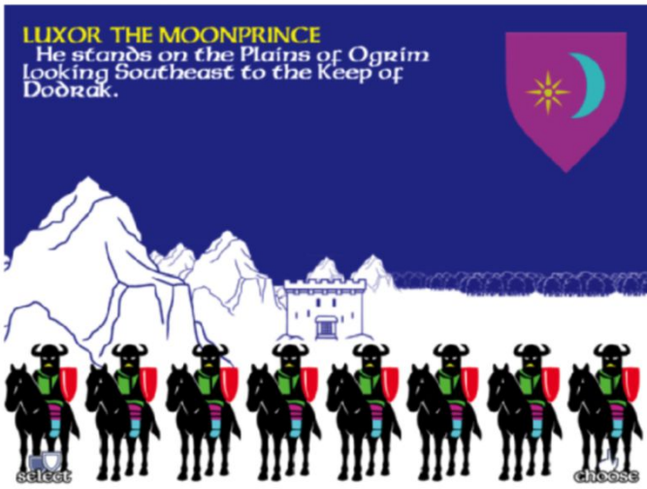
WHY NOT TRY

▼ SOMETHING OLD
ADVENTURE (ATARI 2600)

▼ SOMETHING NEW
SKYRIM (XBOX 360)



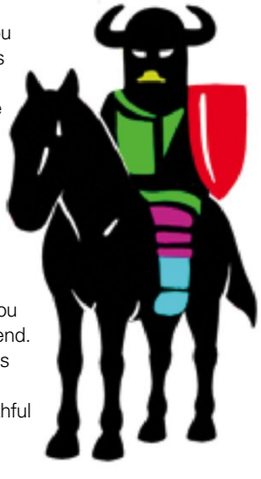
» [iOS] The new touch screen interface works well, making your journey around Midnight simple, but no less dangerous.



The design of *The Lords Of Midnight* was quite novel for its time. The action played out from an immersive first-person perspective, with players strategically moving their characters via a compass style navigation system and the world displayed to them as a series of static panoramic pictures. Around the land of Midnight you had to be wary of wolves, dragons, trolls and other enemies, which could be fought or sometimes hidden from, while trying to find settlements to rest at, useful clues to aid you, and other lords and armies with which to fold into your party to make stronger. Movement was also turn based, with your party limited to making a certain number of moves until the time at which night fell on the land, though to speed up proceedings you were given the option to force a day to end.

The first thing that struck us about this latest conversion is its new visual style. Looking fresh and crisp, but still very faithful

» [iOS] Players must apply a certain amount of strategy and planning to thwart Doomdark, with three ways to play the game.



Luxor the Moonprince
Five houses of the day remain and Luxor is imprisoned. The ice foxes in every mile. Luxor is already bold. He has with him the Moon Ring.

The making-of

This conversion was finished through dedication of *Lords*' fan Chris Wild, and the assistance of artist Jure Rogelj. Wild had been working with Singleton to get an update of the game to iOS and other mobile platforms before Singleton's sad death in October of last year. This didn't spell the end of the project though, and instead motivated Chris to finish it in Singleton's memory. Chris then decided to rethink a few aspects, and remove some of the newer elements originally planned to make it feel closer to the original. The end result is a fitting tribute and a poignant conversion.

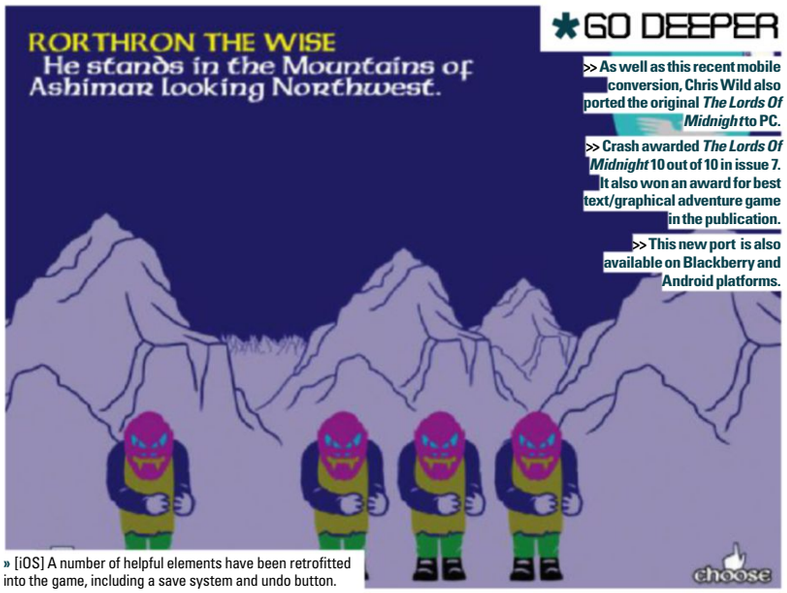
to the look of the original, Midnight and its denizens now have an almost medieval tapestry look, one which suits the theme of the game rather nicely. This, you then discover, is complemented well by the touchable way in which you can now interact with the fantastical world, which has also been well thought out, and sees you tapping or swiping the screen to move characters and bring up and navigate a command box that lets you fight, hide, search and direct your armies should you have any under your control.

Combat is as it has always been, meaning there are some characters that

OPINION

It's great to see that *The Lords Of Midnight* has lost none of its magic over the past 29 years. Its sheer scope and ambition still holds up today, while the adventure itself is still highly enjoyable (although it's a little more slow going at its start than I remember). The port itself is very good, with superb touch controls, a nice interface and a clever tutorial that makes navigating the game world far easier. There's even a handy short cut to the original novella. Excellent stuff all round.

Darran Jones



» [iOS] A number of helpful elements have been retrofitted into the game, including a save system and undo button.

GO DEEPER

>> As well as this recent mobile conversion, Chris Wild also ported the original *The Lords Of Midnight* to PC.

>> Crash awarded *The Lords Of Midnight* 10 out of 10 in issue 7. It also won an award for best text/graphical adventure game in the publication.

>> This new port is also available on Blackberry and Android platforms.

are better at handling themselves in hostile situations than others and a sense of uncertainty to the outcomes of clashes with enemies. It's a very good thing then that this new update introduces a handy undo button and a save feature that allows you to leave and return to your quest at any time and have multiple games on the go at once. Another godsend comes in the form of the map screen. Absolutely invaluable for mobile play, it gives you a choice of two maps: a static one that gives you an entire overview of the land of Midnight, highlighting places of interest, and an interactive version that shows the locations of your party members and areas and enemies you've come across during that game, revealing themselves on the map, fog of war style.

It is these delightful little touches that make this return to *Midnight* such a joy, and while you could argue that this latest conversion doesn't really do anything particularly daring or ambitious – there are no new areas to explore, objectives to meet, and Midnight remains as eerily silent as ever – you certainly won't be able to deny it's not a fitting tribute to Singleton and a testament to how solid world building and creative storytelling can have a lasting impact that stretches generations.

In a nutshell

The new touches are practical, the refreshed graphics look great on a retina screen, while the gameplay remains as engrossing as ever – a timeless classic wonderfully remastered for iOS and a must have for adventure fans.

>> Score **90%**

» [iOS] Also included is a lovely looking map of Midnight, invaluable for mobile play.

Wii U

» [Wii U] Ryu now has a full complement of weapons, slowly unlocking them as the game progresses. They add greatly to the original combat.

THE GORIEST INSTALMENT IS ON... A NINTENDO CONSOLE

Ninja Gaiden 3: Razor's Edge

We did not enjoy *Ninja Gaiden 3*. Its story was bobbins, its combat was watered down, many of the trademark weapons were nowhere to be seen and it appeared to have forgotten everything that made the original 2004 reboot so good. It's something of a relief then to discover that this new Wii U edition goes a long way to righting many of the wrongs that appeared in the original game.

For starters, it's brutal, incredibly so. Limbs get hacked off with aplomb and claret gushes from every orifice in a way that's far more violent than in the original versions. Gameplay has been greatly overhauled as well. The sections where Ryu would be taken over by his cursed arm have been replaced by excitingly frenetic arenas full of deadly foes, while there's now a huge range of weapons, giving back the combat depth. You can once again earn essence to unlock a range of moves, magic and costumes, while the enemies feel far tougher this time around and more satisfying to fight. The downside to this however is that certain boss fights now sometimes verge on the unfair, and you'll occasionally hit a brick wall (unless you decide to drop down to an easier skill level to beat them).

Other improvements to the core game include removing the annoying soldiers who would beg for their lives (morality doesn't suit the *Ninja Gaiden* universe), the cutting of many of the more pointless QTEs, the addition of Ayane as a playable character at certain stages of the game and all the DLC from the original PS3 and Xbox games.

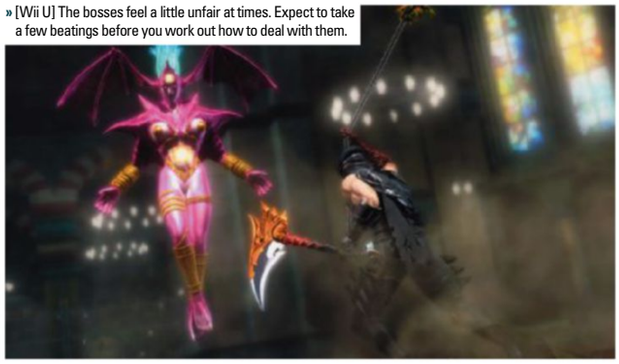
The story is still bobbins and the linearity of *Ninja Gaiden 3*'s levels is depressingly obvious, but combat was always the pull of the series, and while this doesn't reach the heights of *Ninja Gaiden Black*, it remains an insanely fun game all the same. It's rare that a developer will admit to making mistakes, and it's rarer still to see one actually improve on them; so kudos to Team Ninja for giving Ryu Hayabusa some of his much-needed bite back.

INFORMATION

- **FEATURED SYSTEM:** WII U
- **ALSO AVAILABLE ON:** N/A
- **RELEASED:** OUT NOW
- **PRICE:** £49.99
- **PUBLISHER:** NINTENDO
- **DEVELOPER:** TEAM NINJA
- **PLAYERS:** 1 (1-8 ONLINE)

BRIEF HISTORY

» *Ninja Gaiden* was released in arcades in 1988. Another *Ninja Gaiden* was released on NES the same year and became famous for its crushing difficulty. Rebooted in 2004 for Microsoft's Xbox, this spawned two sequels. *Razor's Edge* is an update of the third game, which came out in March 2012.



» [Wii U] The bosses feel a little unfair at times. Expect to take a few beatings before you work out how to deal with them.

» [Wii U] Some chapters now allow you to play as Ayane. She's basically a nimbler version of Ryu.

OPINION

It's a strong conversion with a lot of the issues in the original release getting addressed, which is refreshing to see. Elements have been mercilessly hacked off like dead, pongy limbs, carving out a much better game as a result. It's not perfect, but the combat certainly feels faster, frantic and more challenging.

In a nutshell

Combat still isn't as deep as the original reboot, but if you're looking for a fun, brainless fighter for your Wii U you'll discover that *Ninja Gaiden 3: Razor's Edge* ticks nearly all the right boxes.

>> **Score 71%**

GO DEEPER

The facts behind NG3: Razor's Edge

>> **Tomonobu Itagaki, who was instrumental to *Ninja Gaiden*'s reboot did not work on part three.**

>> **A new zombie-themed *Ninja Gaiden* game was recently revealed, headed by Keiji Inafune.**

>> **Protagonist Ryu Hayabusa is a playable character in the *Dead Or Alive* franchise.**

WHY NOT TRY

▼ SOMETHING OLD

DEVIL MAY CRY (PS2)

▽ SOMETHING NEW

BAYONETTA (XBOX 360)

The Cave

RON GILBERT'S CAVE STORY

» **FEATURED SYSTEM:** PC » **ALSO AVAILABLE ON:** PS3, XBOX 360, WII U » **RELEASED:** OUT NOW
» **PRICE:** £9.99 » **PUBLISHER:** SEGA » **DEVELOPER:** DOUBLEFINE » **PLAYERS:** 1-3

>> Ever since Ron Gilbert first announced *The Cave* we've been following it with eager expectations. After all, its been gestating in his mind for nearly 20 years, when he was first at LucasArts. Sadly, while *The Cave* comes close to those glory days of old, numerous little niggles stop it from achieving true greatness.

The Cave sees you controlling seven adventurers that range from a forcefield-wielding knight, to a scientist that can hack into computers. Three characters can adventure into the titular cave at any one time, which contains specific levels dedicated to each character.

You can switch between each character with a simple key press and use them to solve numerous puzzles from snatching gold from a dragon to retrieving an electrified fuse box. Sadly, these puzzles are rather simple, and while the levels are cleverly built around each character's skill, the skills of your other heroes have no impact; they're simply there to handle grunt work.

Backtracking is also an issue, with you endlessly traipsing back and forth for no good reason (annoying as everyone *can* warp together, but only sometimes.) The multiplayer is a nice idea, but feels poorly implemented, as you must all stay together to progress.

And yet for all the little niggles there's no denying that *The Cave* is enjoyable to play. Full of character and featuring some genuinely funny moments and strong narration (from the cave itself) it's a fond tribute to the point-and-click adventures of yesteryear. It's just a little disappointing considering the involvement of one of the genre's biggest pioneers.

>> Score **70%**

PC

» [PC] There are plenty of references to past LucasArts games, which is a nice touch.

» [PC] Puzzles range from outrageously easy to extremely fiendish. This one falls in the easy bracket.

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RETRORATED

>> WRECK-IT RALPH/AFTER BURNER CLIMAX

Wreck-It Ralph

DISNEY WRECKS CLASSIC RETRO GAMES

» **FEATURED SYSTEM:** iOS » **ALSO AVAILABLE ON:** ANDROID » **RELEASED:** OUT NOW » **PRICE:** £0.69 » **PUBLISHER:** DISNEY » **DEVELOPER:** SARBAKEN » **PLAYERS:** 1

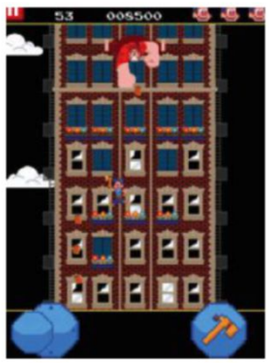
>> *Wreck-It Ralph* is something of an uneven film, so it's somewhat appropriate this iOS release is also a mixed bag. Like the film itself, *Wreck-It Ralph* the game takes its inspiration from classic games of old. The end result is an interesting mish-mash of ideas let down by either weak visuals or difficult controls. *Sugar Rush Sweet Climber* is by far the poorest mini-game, being a weak *Doodle Jump* variant with stiff controls and garish visuals. *Turbo Time* on the other hand is a decent (ish) take on *Super Sprint* which is ultimately let down by some twitchy, over-sensitive controls. Then there's *Hero's Duty*, a *Robotron* rip-off that has ugly visuals and rather weedy power-ups. It's fun in the way that twin-sticks shooters can be, but it takes an age to get truly challenging.

So why the positive score if the vast majority of games are rather poor? Simple. *Fix-It Felix Jr* is great fun, easily justifying the £0.69 entry point.

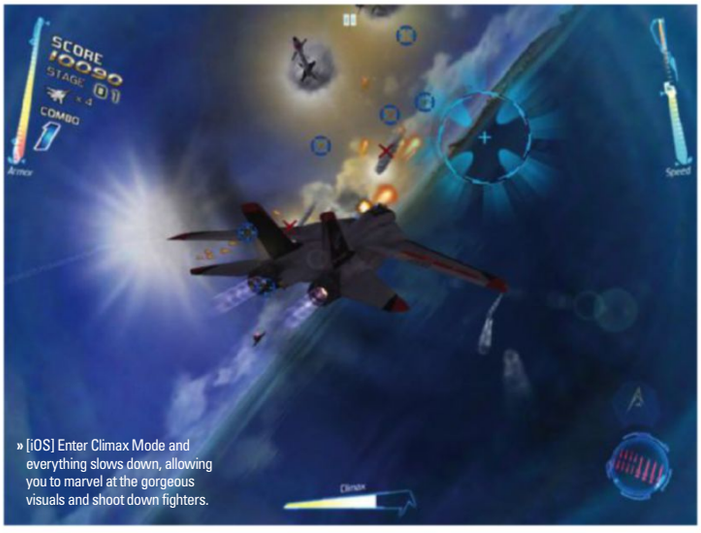
Essentially *Donkey Kong* with a little splash of *Rampage*, each level starts off with Ralph climbing up a building, reaching the top and telling Felix that "I'm gonna wreck it!' As Fix-It Felix Jr, your job is to jump around the window sills, fixing windows with your magic hammer while avoiding the debris that Ralph constantly throws at you. Pies can be collected to grant you invulnerability for a limited time, while flower boxes and window shutters attempt to close of routes, ensuring that the game gets progressively trickier as you chase after your ham-handed nemesis. Later stages introduce additional hazards like birds, while debris can smash windows you've already fixed.

Blessed with tight controls and a genuinely decent level of challenge and polish, *Fix-It Felix Jr* is the shining highpoint in an otherwise forgettable compilation of retro-themed mini-games. Alternatively, play it for free online.

>> Score **65%**



» [iOS] While *Turbo Time* is a decent looking racer, it's let down by rather finicky controls.



» [iOS] Enter Climax Mode and everything slows down, allowing you to marvel at the gorgeous visuals and shoot down fighters.

» [iOS] *After Burner Climax* is crying out for arcade support, as it would a huge difference to its gameplay.

After Burner Climax

MORE OF AN ANTI-CLIMAX

» **FEATURED SYSTEM:** iOS » **ALSO AVAILABLE ON:** PSN, XBOX LIVE ARCADE » **RELEASED:** OUT NOW » **PRICE:** £1.99 » **PUBLISHER:** SEGA » **DEVELOPER:** FISHING CACTUS » **PLAYERS:** 1

>> We're not sure how it's happened, but developer Fishing Cactus has somehow managed to cram a once state-of-the-art arcade machine into Apple's sleek iPad. The end result, while not perfect, goes a long way to capturing the excitement and sheer exhilaration of the original arcade machine that Sega first released back in 2006.

This iOS port is extremely impressive from a content point of view, featuring all the levels of the original arcade game, meaning there are over 20 stages (including some secret ones) to uncover. There's also a slick Score Attack mode in addition to the main game, meaning you get plenty of blasting for your two pounds. Technically, it's extremely slick with highly detailed environments that capture the blue skies beauty of the original game. Sadly, the frame-rate is not as stable as we'd like and the game will occasionally chug on an iPad 3, meaning a slight loss of control of your multi million-dollar plane.

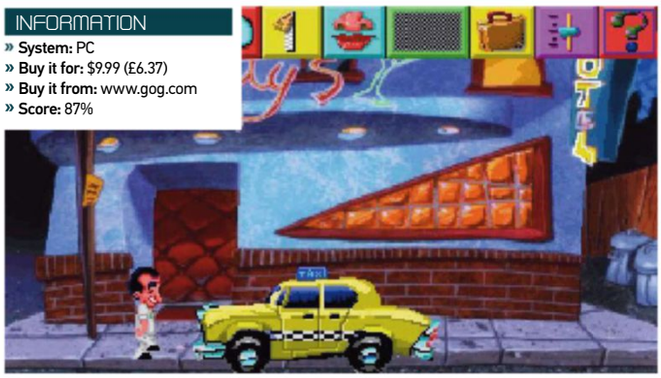
This in itself is something of an issue as *After Burner Climax's* controls are the only thing that really let the game down. While it's possible to use a virtual joystick or accelerometer controls, neither is really up to the job of avoiding the constant stream of missiles that are fired at you by enemy planes. It's particularly noticeable on the later stages, as attacks become more aggressive and it becomes increasingly harder to pull off all-important barrel rolls. Button placement is also fiddly with the turbo/brake button being nowhere near your firing controls. This is fine when using the smaller screen of the iPhone, but it becomes a bigger concern when using the larger iPad. iCade compatability would have been a massive boost to controls and gameplay.

After Burner Climax does manage to capture the exhilarating speed and franticness of the arcade original, but its controls really hold it back.

>> Score **60%**

DOWNLOAD OF THE MONTH

INFORMATION
» **System:** PC
» **Buy it for:** $9.99 (£6.37)
» **Buy it from:** www.gog.com
» **Score:** 87%



Leisure Suit Larry:
Greatest Hits And Misses!

Time hasn't been too kind to Larry Laffer. Despite a number of attempts to bring him up to date with today's gamers, he's never quite made the same connection that he did in the early Eighties and mid-Nineties. This in itself is a shame because once you get past the lewd jokes and sexual content, you realise that the series (at least in its early days) had quite a lot to offer.

Good Old Games is clearly a fan of the ageing Casanova, as it has just released the majority of Larry's early adventures, as well as *Softporn Adventure*, the very text adventure that inspired Al Lowe to create Larry in the first place. In fact the only games missing are *Love For Sail!*, *Magna Cum Laude* and *Box Office Bust*.

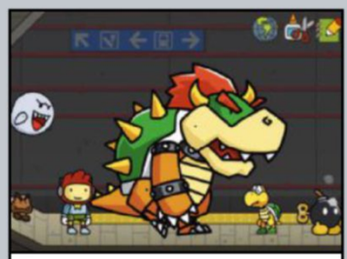
The original game has aged quite badly (it was released in 1987) with ugly visuals and a clumsy interface that makes progression quite tough. Fortunately, this bountiful compilation also includes the VGA version that was released in 1991, incorporating a slicker interface that makes it a lot easier to play and far more enjoyable. It's worth revisiting the original to see how far the series has progressed, but the VGA offering is the one to get stuck into.

The games themselves remain a lot of fun, mainly because Al Lowe is such a great writer. Sure there are sexist comments and other questionable one-liners that highlight the games as a product of their time, but Al never lets you forget that the real butt of the jokes here is loser Larry and not the girls he's so desperate to sleep with. Being a GOG product this comes with a number of nice extras that range from wallpapers and avatars to some useful hint books (handy as some of the puzzles, particularly on the early games, are quite obscure). The humour will certainly wear thin for some, but you're still getting a lot of great gaming for your money.

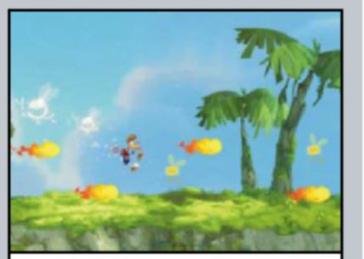
>> OTHER HIGHLIGHTS

Balloon Fight
» **System:** NES
» **Buy it for:** £3.49
» **Buy it from:** Virtual Console (Wii-U)
» **Score:** 86%
» This might just be *Joust* with men dressed as penguins, but that doesn't mean it's not a lot of fun to play. While *Balloon Trip* highlights the game's (purposely) sluggish controls, the main game is a lot of fun with you desperately popping the balloons of penguins before they can do the same to you. It's a little repetitive, but the core gameplay never becomes boring as there are so many enemies.

Hitman HD Trilogy
» **System:** PS3, Xbox 360 (tested)
» **Buy it for:** £29.99
» **Buy it from:** online, retail
» **Score:** 70%
» Disappointing is the best way to describe this compilation. Only *Hitman 2: Silent Assassin* and *Hitman: Contracts* have received 'HD' treatments, and they're pretty basic at best. *Hitman: Blood Money* is just the same game that came out in 2006 (PAL-50 problems and all) but it remains the best thing on this disc. The games are still enjoyable, but we were hoping this would have received a little more love.



Scribblenauts Unlimited
» **System:** Wii U (tested), PC
» **Buy it for:** £44.99
» **Buy it from:** Online, retail
» **Score:** 68%
» The biggest draw of *Scribblenauts Unlimited* also proves to be its Achilles' heel. You can now use a variety of classic Nintendo characters and items to solve the clever puzzles that are thrown at you. Unfortunately, you can't manipulate them in the same way that you can with other items in the game. The formula itself remains as clever as ever, but this sandbox puzzle game does feel like it is running out of ideas.



Rayman Jungle Run
» **System:** Android (tested), iOs
» **Buy it for:** £1.99
» **Buy it from:** Googleplay, AppStore
» **Score:** 86%
» Ubisoft's Rayman running game hits Android and it remains as fun as ever. Rayman constantly runs forward collecting as many Lums as he can. Initially he'll only be able to jump, but new worlds introduce new abilities, which constantly test your skills and reflexes. While *Jungle Run* looks and sounds glorious, it's the tightly designed levels and addictive gameplay that will keep dragging you back.

DmC: Devil May Cry

» **System:** PC (tested) PS3, Xbox 360 » **Buy it for:** £49.99 » **Buy it from:** Online, retail » **Score:** 79%

We weren't expecting good things from *DmC: Devil May Cry*, mainly because the game's emphasis has always been on exhilarating combat; something developer Ninja Theory had never proven itself at. But we needn't have worried. Capcom has been heavily involved in the fighting engine, and while it's a little too easy for our tastes, there's no denying that it makes for some really exciting battles, particularly epic boss fights. The entertaining combat is mainly down to the devil and angel weapons that Dante can access with a quick tap of a trigger, as they allow him to pull off some crazy combos that are as effective as they are ridiculous to look at.

The game itself is nice and streamlined, with tightly designed levels that call to mind the original, and the sort of excellent acting and motion capture you expect from Ninja Theory. It lacks the depth of part three and the devil weapons are a little overpowered, but *DmC* is nevertheless a solid return to form for Capcom's 12-year-old franchise.

HOMEBREW

>> The scene's latest news and reviews

Protovision's Metal Dust is an unusual C64 game; it requires the chunky 16-bit 65816 CPU and at least 4Mb of RAM provided by a SuperCPU expansion so, because they tend to go for silly money online these days, only a select few have ever played it… until now that is. The VICE emulator now has support in beta for CMD's accelerator, so Metal Dust can finally be played by everyone!

» [C64] What are those things for?

FORMAT: COMMODORE 64
DEVELOPER: GEORG ROTTENSTEINER
LINK: WWW.KIKSTART.EU/WONDERLAND-C64
RELEASE: 2012
PRICE: FREE, CARTRIDGE £TBA
REVIEWED BY: JASON KELK

SOMETHING NASTY IN YOUR GARDEN'S WAITING

WONDERLAND

In a land far away, the legendary four crystals are magical artefacts of immense power that have rather inconveniently been lost over the centuries. But now an army of evil creatures has invaded Wonderland and threatens to destroy it entirely, so that power is needed and the gems must be located by a brave elfin warrior to be taken to the Altar of Winds. It's a good thing all these adventurous people are out there really, because these important artefacts do seem to go missing on quite a regular basis…

Written by Georg Rottensteiner and featuring graphics by Trevor Storey and sound by Sean Connolly, *Wonderland* was a surprise late entry into the 2012 cartridge game competition organised by RGCD, which means that the game is initially crammed into a miniscule 16K of memory. But despite being tiny to begin with, there are no signs that process has limited the scale of the game itself since it offers not one but two large maps to negotiate, one on the surface and the other underground.

Wonderland itself is presented as a series of single screens viewed from above and the player's character travels around looking for items to help in their quest; throughout the subterranean and surface landscapes there are hordes of enemies that can be slain to gather coins or hearts that replenish health and there are magical chests containing even more cash, extensions to the health bar and new weapons including the Fire Wand, a useful boomerang and the large, cartoon-style bomb which can be used for… well, blowing stuff up, really.

Even with the changes in landscape detail and colour between different areas, the sprawling territory does mean that it's very easy to get lost in *Wonderland,* so the game helpfully keeps a square area representing the map on its status bar which is filled in as each location is visited, as well as highlighting where the staircases between the surface and underground areas are once found and displaying the player's position. This is only a rough guide and doesn't show how the rooms are linked to each other, so those possessing a less solid sense of direction might want to think about drawing something more detailed.

» [C64] Row, row, row your raft.

It has to be noted that *Wonderland* is a little flawed, with the way enemies are randomly placed, which sometimes means they can be positioned unavoidably close to the player on entering a room. This can prove frustrating when it happens – especially with a nearly empty health gauge – but doesn't take too much enjoyment away from what is an expansive and entertaining game that should entertain fans of the genre and action-oriented gamers alike.

89%

» [C64] The lock for this must be huge!

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk

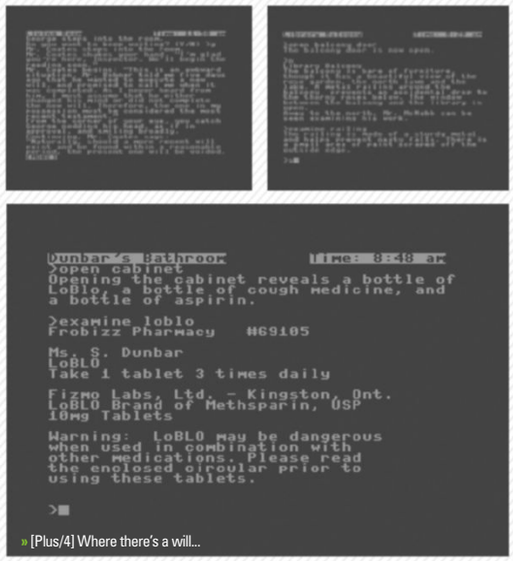
DEADLINE

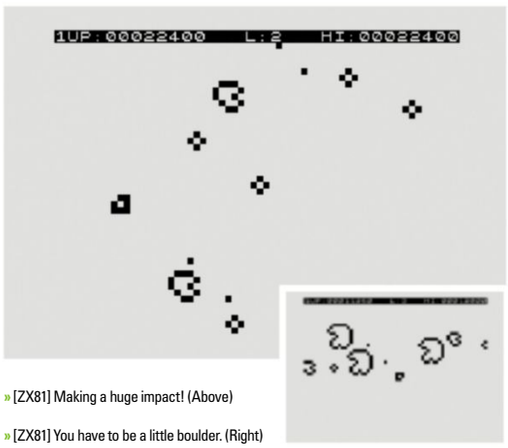
» **FORMAT:** DEADLINE » **DEVELOPER:** GARY COOPER
» **DOWNLOAD:** WWW.KIKSTART.EU/DEADLINE-264 » **PRICE:** FREE

Wealthy businessman Marshall Robner has been found dead in his library. The door was locked from the inside and the deceased apparently took an overdose of his antidepressants so the coroner has declared the death a suicide… but for one detective, something doesn't add up. Could Robner have been *murdered*? And if that's the case, can the evidence be found to bring his killer to justice?

Deadline was one of the first murder mystery adventures developed by Infocom in 1982 and this port is based on the C64 version. Events occur based on the game's clock, so characters roam around the house and grounds while the player-controlled inspector investigates and some events happen at specific times. This does initially does make *Deadline* slightly trickier to get into than more conventional text adventures, but the story is well written and immersive and peppered with humorous moments throughout; we particularly enjoyed the description of the paperboy's skills and the always grumpy McNabb the gardener.

87%


Dunbar's Bathroom
Time: 8:48 am
>open cabinet
Opening the cabinet reveals a bottle of LoBlo, a bottle of cough medicine, and a bottle of aspirin.
>examine loblo
Frobizz Pharmacy #69105
Ms. S. Dunbar
LoBLO
Take 1 tablet 3 times daily
Fizmo Labs, Ltd. - Kingston, Ont.
LoBLO Brand of Methsparin, USP
10mg Tablets
Warning: LoBLO may be dangerous when used in combination with other medications. Please read the enclosed circular prior to using these tablets.
>■
» [Plus/4] Where there's a will...



» [ZX81] Making a huge impact! (Above)
» [ZX81] You have to be a little boulder. (Right)

IMPACT!

» **FORMAT:** SINCLAIR ZX81 » **DEVELOPER:** BOB SMITH
» **DOWNLOAD:** WWW.KIKSTART.EU/IMPACT-ZX81 » **PRICE:** FREE

Bob Smith, having noted that the venerable ZX81 wasn't well served for rock-blasting action, has created *Impact!*. For that one person reading who hasn't played *Asteroids*, the player's ship appears in the middle of an asteroid field and must reduce everything to rubble; along with shooting, the ship can rotate, thrust to move about the wrap-around play area and make a potentially fatal local hyperspace jump in emergencies. The enemy UFOs that occasionally drift across the play area have been left out of *Impact!* so it's just the player's ship versus several space-bound boulders but, although this does mean there's a little less variety to the levels, that omission doesn't prove to be a major one in the long run and the game is still fun.

86%

TEODORO NO SABE VOLAR

» **FORMAT:** MSX0 » **DEVELOPER:** RETROWORKS AND DIMENSION Z
» **DOWNLOAD:** WWW.KIKSTART.EU/TEODORO-FLY-MSX » **PRICE:** FREE

Teodoro the parrot is a jester who took the job because he can't fly and wasn't eligible to become a soldier, but when the kingdom is ransacked, the army defeated and the king dragged off, it falls to Teodoro to journey to the top of the signal tower and light the signal fire to warn the surrounding kingdoms.

There's no clock to worry about so each location can be considered at length and taking a slow, measured approach is vital to survival because there are hazards that cycle on and off which don't necessarily appear straight away.

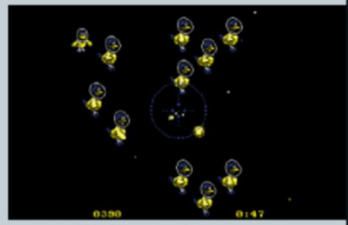
Ten parrots are dished out to begin with and more can be earned by collecting coins, but the difficulty level means that they're not an option to find but absolutely necessary since there are traps everywhere for unwary players to wander into. Fans of a solid challenge should try *Teodoro No Sabe Volar*, but it does require a little acclimatisation and patience.

87%

» [MSX] I'm sorry, I have a cold. (Right)
» [MSX] Remarkable bird, the Norwegian blue. (Below)

WHAT'S BREWING?

All the latest news from the homebrew community


» [Amstrad CPC] *CyberHuhn*... Chickens in space!

>> WHAT DOES THAT GET YOU TODAY?

The Amstrad community over at CPCWiki has recently launched a 16K ROM game development competition, with the intention being to produce more games that can utilise existing hardware such as the Megaflash and Symbiface devices. www.kikstart.eu/cpc-16k-2013 is the place to be for rules and so forth, the deadline is set for the beginning of July.

» [C64] Bombs away!

>> WE HAVE TO GO DEEPER

Originally released in 2008 by the recently rebooted publisher Psytronik, *Sub Hunter* on the C64 was an underwater blaster developed by Richard Bayliss and Frank Gasking and it can now be purchased in cartridge form. The game has even been made fully C64GS friendly and arrives as a blue cartridge wrapped in high-quality packaging. A link to RGCD's shop is submerged behind www.kikstart.eu/sub-hunter-cart-c64

» [ZX81] Trust me, I know what I'm doing.

>> STICK 'EM UP

It has an exceptionally ridiculous name and is sadly just a preview version of a game that'll never be completed, but the Mojon Twins have recently released *Super Refried Gun Operation*, which is a horizontally scrolling shooting gallery for the ZX81. It lacks a title page and doesn't appear to have been fully tuned, but www.kikstart.eu/refried-zx81 drops off at the specific page on the Mojons' website to download the preview.

HOMEBREW

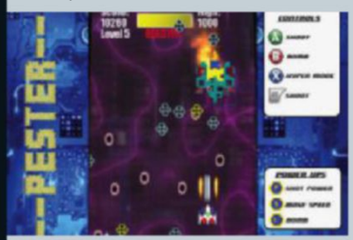
>> The scene's latest news and reviews

WHAT'S BREWING?

All the latest news from the homebrew community

>> VIOLENCE IN THE INSECT WORLD

We mentioned Flump Studios' first XBLIG game *Super Killer Hornet* back in issue 107 and the studio has recently been in touch to talk about its new game *Pester*. It's a shoot-'em-up and the description we've been given sounds like a cross between classic Eighties games and the more recent Cave bullet hell titles, which certainly seems to be backed up by the in-game screenshots! *Pester* should be available from XBLIG by the time this goes to print and www.kikstart.eu/pester-video-xblig will zap over to the preview video on YouTube.



>> FANDOM GONE WRONG

Bleed has a slightly unusual storyline, casting the player as the purple-haired Wryn, who is described as "a girl with a big arsenal and big dreams" since she wants to become the ultimate videogame hero and plans to take out her rivals to achieve that goal. Wryn's mission is a cartoon-styled run 'n' gun with multi-directional firing from the second thumb stick. Find it at www.kikstart.eu/bleed-xblig

Want to know how to while away those boring office hours? Don't miss out on **Retro Gamer**'s *Flash game of the month. This month we look at* **Mad Princess.**

WHAT IF THE PRINCESS DIDN'T NEED SAVING AND WAS ACTUALLY A RUTHLESS SADIST INTENT ON KILLING ALL THE BRAVE/STUPID MEN TRYING TO RESCUE HER? SHE USES DARK MYSTICAL POWERS TO MAGICALLY SET DIABOLICAL TRAPS WHICH SAP THE ENERGY OF PASSING HEROES. THINK SOMETHING LIKE TOWER DEFENCE BUT MORE GORY! WWW.KIKSTART.EU/MAD-PRINCESS-FLASH

MORE GAMES WE'VE BEEN PLAYING. . .

HEAVY RECOIL: CONVOY CHASER

» **DOWNLOAD:** WWW.KIKSTART.EU/HEAVY-RECOIL-XBLIG

Matti and Max are the only two members of an elite squad of marines still free after an unnamed force kidnapped their comrades, so rather than hide somewhere and call for help they simply wade in with their shiny new assault suits and give chase to the enemy convoy.

Players can choose between either Matti, who is quick but not heavily armed, or the more ordnance-friendly Max, an old soldier whose war wound slows him down – if a second player joins during play they'll get a clone of the already active character. Each level is push scrolled horizontally as Matti or Max stomp through it and there are kidnapped marines to rescue who reveal the story and explain elements of the game. Both characters can collect items from destroyed barrels that include power ups to increase their abilities during play or stars which unlock bonus stages.

Heavy Recoil's developer Wide Pixel Games have gone for a full-on 16-bit retro feel with some very Mega Drive styled graphics and sound. The gameplay similarly owes a debt to Eighties run-'n'-gun games like *Contra* and particularly *Green Beret* with the difficulty being set around the same level so it might be daunting for some players, especially since there are just three lives and no continues.

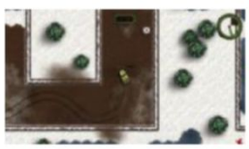
SQUADRON SCRAMBLE

» **DOWNLOAD:** WWW.KIKSTART.EU/SQUADRON-SCRAMBLE-XBLIG

***Squadron Scramble* is** designed for multiplayer battles and supports up to eight players, be they human or AI. The gameplay is reminiscent of the biplane games in Atari's *Combat*, but before taking off the little player-controlled pilots first need to run from their base to the hangar. Once in the air, points can be scored for blasting the planes or pilots on other teams and destroying bonus items. If a plane is dispatched, the pilot will eject and, should they make it safely to the ground, can either return to the tower to hand over to a colleague or fetch another plane; each pilot has their own score and points are carried over between rounds so keeping the entire crew alive is essential to winning.

DECOY

» **DOWNLOAD:** WWW.KIKSTART.EU/DECOY-XBLIG



Most games are about playing the hero, but the objective in *Decoy* is slightly different; rather than take the enemies on directly, the player is equipped only with a jeep and charged with crashing around hostile territory to draw attention away from the soldiers out on dangerous missions elsewhere.

The decoy driver's missions generally alternate between keeping the enemy's aircraft occupied until they run out of fuel and driving to the next designated area in the time allotted, but that all means putting the vehicle directly in the line of fire so some nifty driving will be needed to manoeuvre between the bombs dropped by the overhead planes. Thankfully, the jeep is nippy, has a boost option for emergencies and handles well on most road surfaces.

HOMEBREW HEROES

BOB SMITH HAS BEEN VERY BUSY THE LAST COUPLE OF MONTHS, RELEASING LUMASCII FOR THE SPECTRUM AND FOLLOWING IT WITH IMPACT, NOIR SHAPES AND ONE LITTLE GHOST FOR THE ZX81; WE DECIDED TO ASK HIM A LITTLE MORE ABOUT HOW IMPACT! CAME TO BE

Q&A

What was it about the ZX81 and *Asteroids* that led to *Impact!*'s creation?
I've been coding the ZX81 for a while now and am really enjoying pushing the envelope as far away as I can from the slow and unresponsive games of its launch that, I believe, blighted its place as a capable gaming machine. *Asteroids* is a staple game for any machine but I was really unimpressed by the quality of the versions available and felt I should try and redress the balance.

Do you find it easier to convert games from an existing model or to work from scratch?
It's swings and roundabouts – when you convert a game people will always draw parallels against the original version with which they are so familiar with, and usually find something lacking. Working within the limitations of the ZX81 it is difficult to meet all those expectations and so some features will inevitably be dropped. Original games don't usually suffer from comparison but take longer to design and plan, and so are usually more difficult.

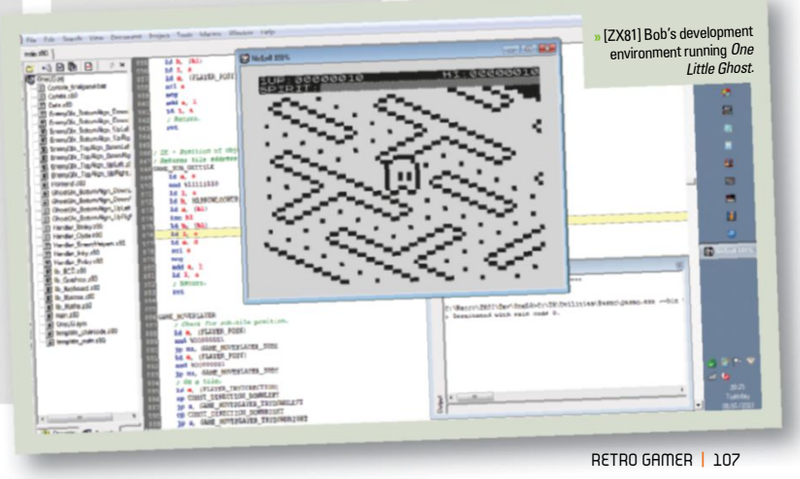
Were the flying saucers not included for technical or design reasons?
I did have a version running which included the saucers but the required collision testing slowed the game down a little too much when things got busy – and the fluid nature of the game was something I really wanted to keep. Graphically, they didn't quite work either as they ended-up being larger than the player. Another issue with them was that with such a small playing area they rarely had an empty region in which to appear, and once they did they didn't tend to last long before being struck by an asteroid, which reduced their effectiveness.

Are there any moments that stand out during the coding of *Impact!*?
One of the first things I wanted to get right was the movement of the player – the ship's inertia is a key factor of how the game plays – so I was really pleased when I got that working well. Then once the other aspects had been added it was just a case of optimising it all enough to keep it fast and fluid.

How difficult generally is coding action games for a machine with limited resources?
It's a fantastic challenge for a programmer to try and get the most from a machine, especially when attempting fluid and responsive arcade games – but most methods to make code faster come at the cost of requiring more memory, which on a 16K machine is somewhat limited. Development is therefore always a trade-off between speed and size, so you get all the main aspects of the game you need, but at a speed which is playable, which usually requires some compromises.

We've already enjoyed *One Little Ghost*, but do you have any further plans for ZX81 games?
Definitely, as I think it still has more to offer – I don't think anybody believed it could handle an isometric game before *One Little Ghost*, and I can go further with that style. There are still game genres that I haven't yet written – which are always nice to have a go at – and also lots of games which I think the ZX81 doesn't have a good version of yet.

» [ZX81] One little, two little, three little asteroids.



» [ZX81] Bob's development environment running *One Little Ghost*.

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky reader will receive a copy of our latest eMag, **Retro Gamer Load 3**, a bargain if ever there was one. All you have to do is present a lucid, thought-provoking piece of literature that melts our souls. Failing that, something funny with swear words, or something *Strider*-related will go down just as well...

STAR LETTER

MORE HANDHELDING PLEASE

Dear Retro Gamer,
Guys, please, please, please, please run a feature on obscure handhelds in a future issue. I'm a huge fan of portables and would love to see them given more coverage in the magazine. My love of them began a few years ago after spotting an original Game Boy selling for a tenner with a few games at a car boot sale and immediately snapping it up. Since then I've made it my life's work to build up a large collection. My personal favourites are obscure machines like the WonderSwan, Gamate and Tiger Game.com, as most have games for them that you cannot get on other machines. Forgive me if there's been an article like this in the magazine – my first ever issue was issue 100 (and 1), and I've been an avid reader since – but the magazine's great, but some more handheld love would make it even better.
Dave Becket

Hi, David. We have run articles on the Gamate and Wonderswan in previous issues, but we were discussing just the other day about how it would be nice to focus on handhelds a bit more in the magazine as we've not done anything on them for a little while now. In fact, we were even toying with the idea of perhaps doing a handheld themed special issue one month.

A COSTLY MISADVENTURE

Hey RG,
I read issue 112 of the magazine and came across the Mega Drive checklist within the Collector's Guide article. When I found out *Misadventures Of Flink* was a rare game I got excited as I own it! Great issue, guys!
Dean Mortiboy

We're always happy to be bringers of good news to our readers, Dean. You weren't the only one to have had their eyes opened by the list either; someone also got in touch to say they had a copy of *The Punisher* in their collection and until reading the feature had no clue that the game was any more collectable than issue #100465 of the comic book.

THE CRYING GAME

Dear Retro Gamer,
I have a story to tell you. I remember the time when me and my brother each got a Nintendo Game & Watch *Fire Attack* for Christmas and my brother said to me "I'm going to lick the tears off your face when everyone at school sees my score of 4,495". I know that it was true that he did get this score because I could hear him screaming for ages locked in his room the night before and coming out panting and sweating, grinning like an idiot and telling me how rubbish I was in comparison. I would soon fix that, I thought.

So the next morning when he was in the bathroom I took the game out of his schoolbag, removed and then replaced the batteries, played for a couple of minutes getting a score of about 120, before putting the game back into in his bag. Later that day was not very fun for me, though. At detention in the principal's office I was reprimanded severely, as I recall, for performing the "unnecessary act of pushing your brother's head down and telling him to 'lick his salty tears' off the ground amidst the jeering and laughter of your gathered schoolmates". I am sure though that today my brother sees the funny side of things finally because I surely do and often like to remind him of that great incident. Finally, please do not again insinuate that my stories are lies or I shall be forced to call the police.
Best wishes,
Tony "The Answer" Dimov.

What a remarkable tale of one brother's determination to show up the other through getting a good score on an LCD game then the other using cunning and batteries to derail his plan. No, seriously, the best of its kind we've heard yet, thanks for sharing it.

DISCUSSED THIS MONTH

Euro Truck Simulator 2

Darran's latest obsession is *Euro Truck Simulator 2*, a PC game that lets you experience life on the open road. As a result, chatter about what he's been up to during his weekends usually revolves around precious cargo and service stations. His obsession with the game has reached a worrying extreme recently. He's put up a saucy calendar in the RG pod and consumed a lot of Yorkie multipacks.

BUBBLE TRUBBLE

Dear Retro Gamer,
See, I remember way back during my high school days when I used to go to my friend David's house at lunchtime, and we would play *Bubble Bobble* on his brand new Amiga. Even though we played two-player, it was always a fierce competition because we had no interest whatsoever in teamwork or working in tandem, and during the EXTEND screen for example, the duration of the music would be spent rolling on his bed trying to either break the other's finger, dislocate a toe perhaps, or just try to hurt or put off the other to some degree so as to minimise their scoring capacity upon resumption of play.

David's mother would often come into the bedroom during these times and when she would see us grappling and grunting in compromising positions, she would gently place our glasses of milk and bowl

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of cookies on the side-table, and back out quietly. Now, I'm not sure what she would have been thinking at the time but I must add, back then I frequently would wear my favourite Adam And The Ants "Prince Charming" T-shirt so I don't think that helped my cause in any way.

But the point that I make to all this is, those were great days, and although I was hospitalised on a number of occasions for multiple abrasions and even once for sporadic bleeding due to an thumb-related injuries, I'd have those days back in a minute if I could. I am quite sure your readers will in unison agree.

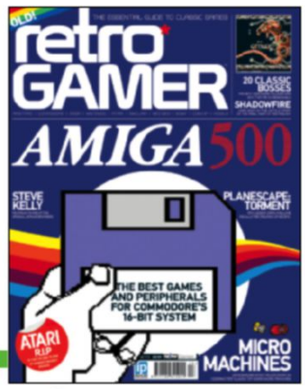
Take care,

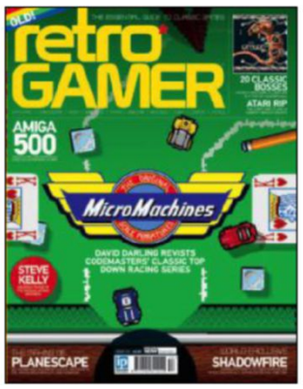
Rob

Hi Rob, there were a few co-op games back then that always seemed to always bring out the angry side of people. Also, not to pick holes in your story Rob (as it did amuse us greatly) but you do know Adam And The Ants disbanded in the early Eighties and the Amiga 500 wasn't released until 1987? We're just saying.

THE ONES THAT GOT AWAY. . .

This issue's covers that nearly happened





DARRAN

We experimented with several different concepts based on the Amiga 500 computer. The one we ultimately went for is my favourite but this design came very close. Using the iconic boot screen image as the focus, it was a neat idea but in the end it wasn't beige enough for an Amiga cover.

STUART

We were lucky enough to get some great insight about the *Micro Machines* franchise and so naturally it was put forward as a cover. We also tried a real-life version of this cover with actual *Micro Machines* photographed on a snooker table, but it just didn't look as colourful and eye-catching.

From the forum

» To have your say visit www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

What's your favourite Amiga 500 game and why?

Hiro

How can I choose one?! Well, Magnetic Fields has a special place in my heart, and while *Supercars 2* is awesome, I'll go with *Lotus Esprit Turbo Challenge*. A fantastic racer, nice tracks, good music, hard but not unfair, and most of all awesome sense of speed. It blew me away.

HalcyonDaze00

Good grief! That really is an impossible question. Such a fantastic games machine I could easily pick fifty, never mind just one. I will say that *Championship Manager* was the start of a 20 year addiction.

MattyC64c

My favourite game was *Civilization*. I only got an Amiga 500+ in 1994, it was by no means 'state of the art', but it was about this time I started to get into strategy games. You simply couldn't get many of these games on the Mega Drive and certainly not *Civilization*.

Scapegoat

So many to choose from, but the disk that took the most abuse was *Deluxe Galaga*, simple shooter done perfectly.

junkmale

Yep. Me too. Still strive to beat my high score at least once per day.

Bobinator

Ruff N' Tumble, for me. Fantastic graphics and sound, with such great use of colour. For me, it's probably one of the games on the Amiga that got the closest to being a console-style game, and I'm honestly surprised it never got a port to the SNES or Genesis like *The Chaos Engine* did.

PaulEMoz

The game I loved the most on the Amiga, and the one game that truly made me believe we had reached the future of gaming, was *Rocket Ranger*. Although it was essentially a series of mini-games, they were stitched together with such stunning presentation (and as part of a cracking old-fashioned serial-style story) that it was never less than entertaining. It had strategy-lite elements too... losing a spy felt like a genuine blow to your efforts. I never got bored with any of it, and it's the one Amiga game I'd love to see either ported to iOS or given a full-blown remake.

Smurph

Tough one for sure. *SWOS* probably got the most play at the time of release, but looking back I think *Apidya* has grown into possibly my favourite, although there are far too many great games to have a definitive 'one'.

Gordon Bennett

Damocles. There was a whole solar system there to explore filled with hidden details to discover. Glorious.

IronMaidenRule

It has to be *SWOS* really, I don't think any footy game will ever be remembered or loved like *Sensi*.

quantum

There really are too many good games to just pick one, but if pushed probably a multiplayer game. *SWOS*? *KO2*? *Speedball 2*?

retro GAMER

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www.retrogamer.net
www.greatdigitalmags.com

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Printed by Wyndeham Heron Ltd, Bentalls Complex, Colchester Road, Heybridge, Maldon, Essex, CM9 4NW
☎ 01621 877 777

Distributed in the UK & Eire by: Seymour Distribution, 2 East Poultry Avenue, London, EC1A 9PT
☎ 020 7429 4000

Distributed in Australia by: Gordon & Gotch, Equinox Centre, 18 Rodborough Road, Frenchs Forest, NSW 2086
☎ +61 2 9972 8800

Distributed in the Rest of the World by: Marketforce, Blue Fin Building, 110 Southwark Street, London, SE1 0SU
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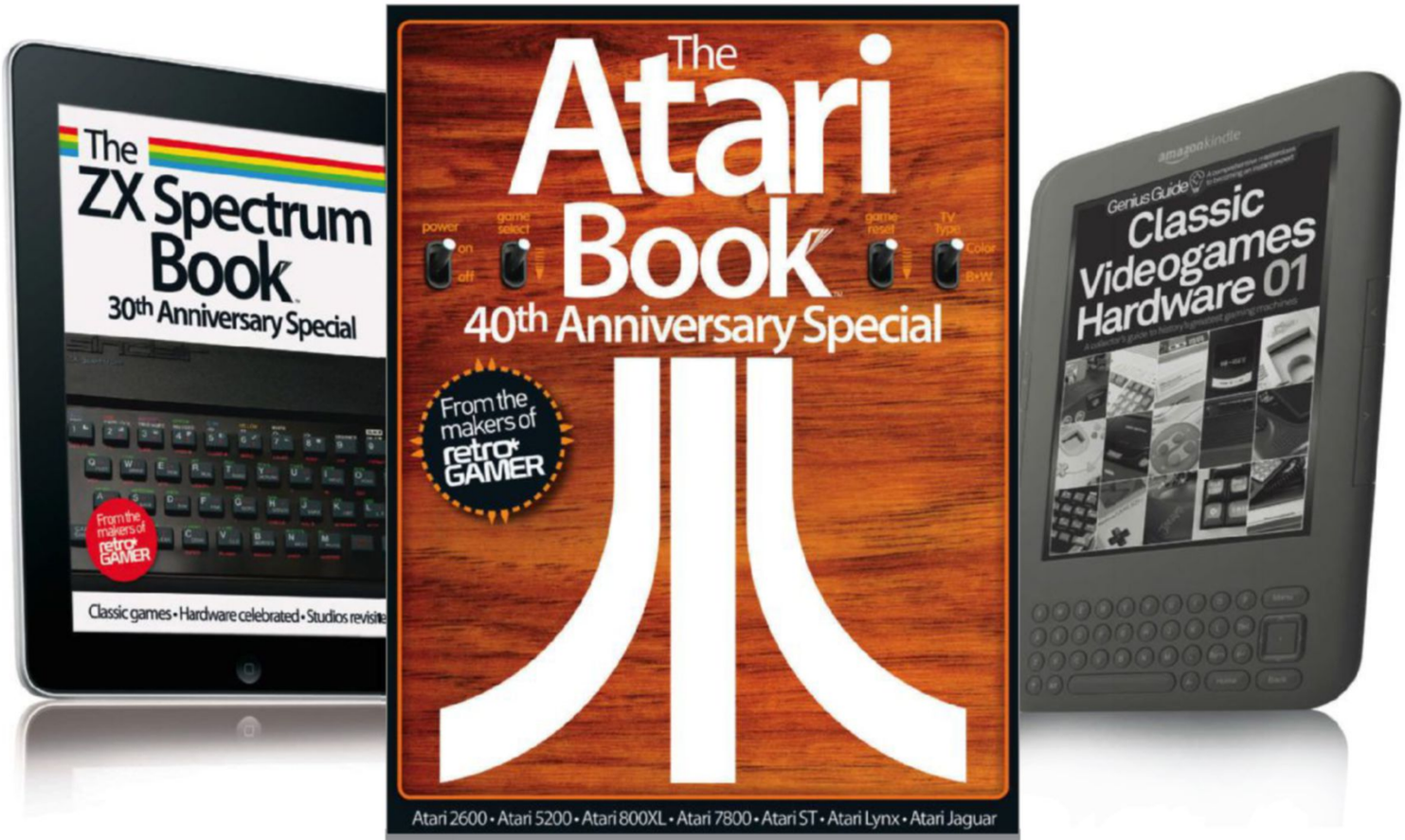
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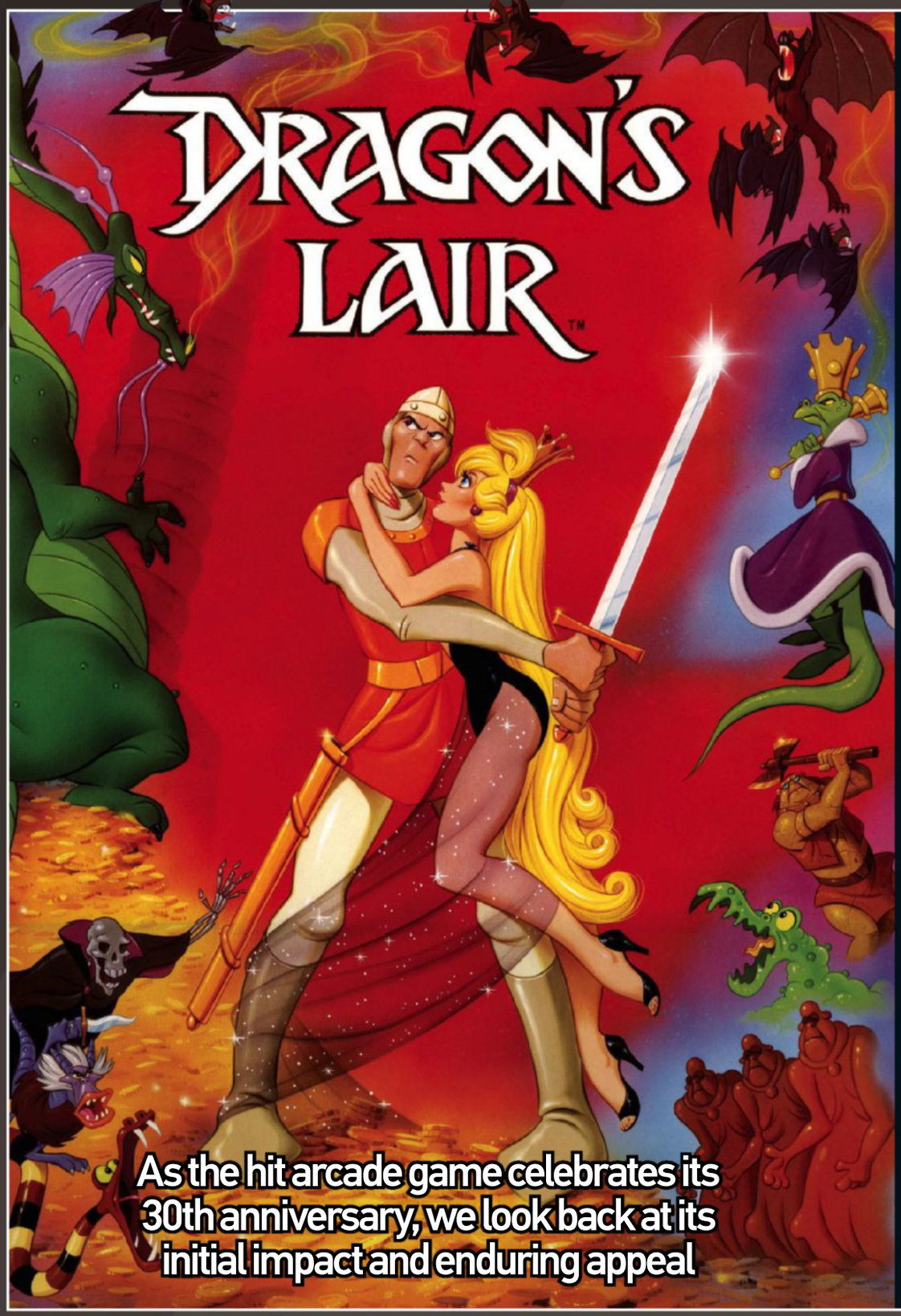

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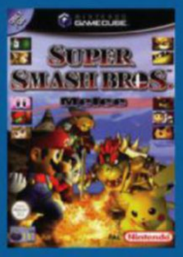

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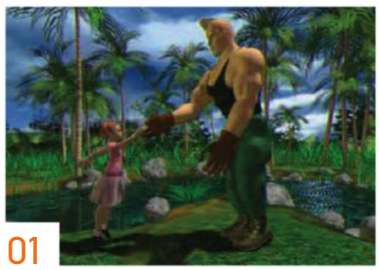
ENDGAME

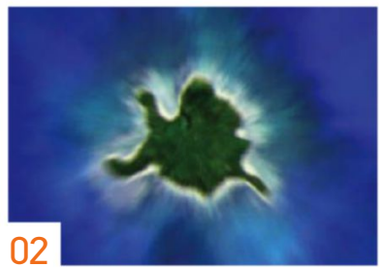
TEKKEN 2

» A classic fighting game needs a batch of amusing end scenes. Street Fighter II popularised the trend and Tekken continued it in fine form. Watching all the bizarre and frankly often nonsensical end screens in the Tekken series was always part of their charm. Here is Jack-2's sad, bizarre and amusing ending from Tekken 2, which isn't so much bittersweet, as sweetbitter



01

» After winning the second King Of Iron Fist tournament, Jack-2 returns to Jane, the young girl he's been looking after since her mother was killed in the war. The two of them appear to live (stranded?) together on an unpopulated jungle island.



02

» This is confirmed (well, the jungle island bit is) by this shot here. We were trying to rack our brains to think whether the shape of this land mass resembled anything that could pass as amusing. It doesn't. We exhausted every possibility.

03

» Thousands of miles above the earth a satellite springs into action, moving into position before sending a nasty looking red laser down to terra firma. What could be the purpose? It shouldn't take a Doctor Bosconovitch to work it out.

04

» While Jane looks into the endless vegetation for a possible way off the island, Jack-2 is struck down by the laser, frying his circuits. Jane is unaware that her cyborg protector is in trouble, and moments away from being terminated.

05

» Now an expensive heap on the floor, Jack-2's last stored image is of Jane, hand outstretched. As the hazy red image turns to empty white noise, so ends one of the most depressing endings of *Tekken 2*. Where's Kuma when you need him?

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